# Fall 2016 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

# Sacramento River Basin

RD0349	Overall LMA	Total LMA						
Reclamation District No. 0349 Sutter	Rating	Miles						
Island	U	12.41						
5 . 16		Maintena	nce Deficiancy		Enforc	ement	Design 8 Obsole	k System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	3.25	21.46	89.09	718.06%	0.10	0.18		
Trim / Thin Trees	0.39	0.01	0.43	3.47%				
Encroachments	0.02	0.03	0.14	1.13%	0.06	0.30		
Animal Control	0.18		0.18	1.45%				
Erosion / Bank Caving		0.01	0.04	0.32%				
Emergency Supplies & Equipment	0.12		0.12	0.97%				
Flood Preparedness & Training	0.12		0.12	0.97%				
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.69	0.16	1.33	10.72%				
DWR UCIP Field Study					0.49	0.02		
LMA Totals:	4.78	21.67	91.46	737.16%	0.65	0.50	0.00	0.00
Unit No. 01 Sacramento River RB	Overall Unit	Total Unit						
	Rating	Miles						
RD0349	U	1.59						
		Maintena	nce Deficiancy		Enforcement			& System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	0.03	1.94	7.79	491.13%		0.18		
Trim / Thin Trees	0.29		0.29	18.28%				
Encroachments						0.01		
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.07		0.07	4.41%				
DWR UCIP Field Study					0.06			
Unit Totals:	0.39	1.94	8.15	513.83%	0.06	0.19	0.00	0.00
Unit No. 02 Steamboat Slough RB	Overall Unit Rating	Total Unit Miles						
RD0349	U	4.32						
			nce Deficiancy		Enforc	ement	Design 8	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	u Miles
Earthen Levee		•		71110011010 70		•		•
Vegetation	2.95	5.87	26.43	611.97%	0.10			
Trim / Thin Trees	0.04		0.04	0.93%				
Encroachments	0.01		0.01	0.23%	0.05	0.17		
Animal Control	0.18		0.18	4.17%				
Erosion / Bank Caving		0.01	0.04	0.93%				
3	l		I	L				
Supplemental								
Supplemental 2015 USACE Erosion Survey, DRAFT	0.45	0.16	1.09	25.24%				
	0.45	0.16	1.09	25.24%	0.17	0.01		

# Fall 2016 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

#### Sacramento River Basin (cont.)

Unit No. 03 Sutter Slough LB	Overall Unit	Total Unit						
	Rating	Miles						
RD0349	U	6.50						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design & System Obsolescence	
Rateu Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	0.27	13.65	54.87	843.89%				
Trim / Thin Trees	0.06	0.01	0.10	1.54%				
Encroachments	0.01	0.03	0.13	2.00%	0.01	0.12		
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.17		0.17	2.62%				
DWR UCIP Field Study					0.26	0.01		
Unit Totals:	0.51	13.69	55.27	850.04%	0.27	0.13	0.00	0.00

# **LMA District Cover Sheet**

#### Fall 2016 Levee Inspection Results

# **Reclamation District No. 0349 Sutter Island**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)			U	

\*\* Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

Reports may effect overall armual rating.								
† SPRING INSPECTIONS:	Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.							
FALL INSPECTIONS:	The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.							
Comments								

# **Unit Cover Sheet**

# Fall 2016 Levee Inspection Results

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento River	Right	1.59

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	4/5/2016 - 4/5/2016		9/29/2016 - 9/29/2016	
DWR Inspector	Herman Phillips		Herman Phillips	
Accompanied By	Fred Wheller RD 349			

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

		Ti .					
LM Start		Rating **	M	Issue No.		3	
LM End		Issue Type +	Ма	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
ltom	Item Emergency Supplies & Equipment				0		0
пеш					٥		0
DWR ID	DWR_RD0	349_01_f _ 201	4_3				
		Comn	nent Cod	de			
	Inspector Comment						
Was not able to see flood fight material storage location. The President							
of the Dist	rict was no	t available wit	h me on	this inspec	ction		

No Photos

LM Start		Rating **	Α	issue No.		4		
LM End		Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	Operations & Maintenance				0		0	
пеш	Manuals Manuals				0		0	
DWR ID	DWR_RD0	349_01_f _ 201	4_4					
Comment Code								

No Photos

Inspector Comment RD 349 has O&M Manual on hand.

able to determine if they have been trained recently.

LM Start		Rating **	М	Issue No.		14			
LM End		Issue Type +	Ма	Location *		WS			
Cotogon Earthen Levee				GPS La	atitud	le/Longitude			
Calegory	Category					End			
Item	Flood Pre	paredness &	Training		0		0		
пеш	item				٥		0		
DWR ID	DWR_RD0	349_01_f _ 201	4_14						
		Comn	nent Cod	le					
	Inspector Comment								
RD 349 do	es not hav	e a crew, only	/ landow	ners and fa	ırme	rs. Was not			

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown	II · I Inaccentable	A/W · Accentable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.00	Rating **	U	Issue No.		15		
LM End	0.99	Issue Type +	Ma	Location *	LS			
Category	Category Earthen Levee			GPS Latitude/Longitude				
Category	tegory			Start		End		
Item	Vegetation			38.327148°		38.313078°		
пеш				-121.5769	52 °	-121.578780°		
DWR ID	DWR_RD0	349_01_f _ 201	6_15					
	Comment Code							
V1 : Contro	ol annual o	rass and wee	eds on th	e levee slor	es a	and		

easements.

#### Inspector Comment

Control the wild growth of vegetation on the landside levee slope.





RD 349 Unit 1 landside looking downstream at levee slope.

Photo 1 of 1: FA\_2016\_RD0349\_204\_20\_20161003\_00024.jpg

LM Start	0.01	Rating ** U		Issue No.		20				
LM End	0.94	Issue Type +	Ма	Location *		Location *		Ma Location *		WS
Category	Category Earthen Levee			GPS Latitude/Longitude						
Calegory				Start		End				
Itom	Vegetatio	n		38.3270	73°	38.313798°				
пеш	Item			-121.5769	45°	-121.578953°				
DWR ID	DWR_RD0	349_01_s _ 201	6_20			·				

#### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove the unwanted wild growth of brush and other vegetation from the waterside slope. Unable to see the ground.



RD 349 Unit 1 waterside looking downstream at shoulder and slope.

LM Start	0.03	Rating **	М	Issue No.		7	
LM End	0.10	Issue Type +	Ма	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	2015 USACE Erosion Survey,			38.32674	13°	38.325844°	
item	DRAFT			-121.57697	79°	-121.577119°	
DWR ID	DWR_RD0	349_01_s _ 201	6_7				
	Comment Code						

#### Inspector Comment

2015: Erosion observed at the toe. [2015 Site ID: SAC\_33-9\_R]

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	80.0	Rating **	М	Issue No.		24	
LM End	0.08	Issue Type +	En	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.32613	3°	38.326133°	
пеш			-121.57714	1°	-121.577141 °		
DWR ID						·	

# Inspector Comment

Comment Code

FS\_ID:44303 DS\_ID:24137 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Pipe appears to be abandoned and if so should be done so properly. Electromagnetic survey indicated a crossing at this location.

location.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch pipe through the levee, 3.8 feet below the crown. Power pole and anchor on the landward side. Deteriorated concrete box at the LS toe. Concrete debris on WS toe good indicator of pump location (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.74).

FS Date: 4/2/2015

LM Start	0.08	Rating **	М	Issue No.	24 (cont)
LM End	0.08	Issue Type +	En	Location *	WS



Deteriated concrete distribution box on LS toe next to power pole.

Photo 2 of 2: UCIP\_FA\_2016\_44303\_73621.jpg



Concrete debris on WS toe is a good indicator of pump location.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.48	Rating **	М	Issue No.		27	
LM End	0.48	Issue Type +	En	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory			Star			End	
Item	DWR UCI	P Field Study		38.320476°		38.320476°	
item				-121.5786	16°	-121.578616°	
DWR ID							
	Comment Code						

# Inspector Comment

FS\_ID:50062 DS\_ID:24139 EP\_NO: 951

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Meet Fred Wheeler with RD349 at this crossing. Crossing is active. Crossing was downgraded from Urgent to Non-Urgent -- no signs of pipe failure visible on surface. Need to contact owner -- dense vegetation on WS and LS should be cleared prior to next inspection. Need to coordinate with owner regarding the 8inch sleeved pipe--need permit number to update record. (DWR UCIP omagana)3/18/2009 Exposed section of levee slope on LS--need to contact owner and DWR inspector. Burrow activity noticed at crossing 10 inch holes. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: 8-inch steel pipe measured (instead of 10inch) sleeved through a 12-inch steel pipe, 6.6 feet below the crown. Annular gap grouted at both ends. Active centrifugal pump on platform at landside (LS) toe. Inactive slant pump on steel platform on waterside slope (not present in 2008 referenced in USACE O&M manual). Exposed section pipe on WS slope. Service pole on the LS slope. (10inch pipe sleeved through pre-existing 12-pipe under Permit No. 3382, 1960 - Davis J. Eliot and Son; 12-inch pipe authorized in under Permit No. 951, 1944 - Stillwater Orgards Company). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual Unit No. 110, May 1959, (HLM 0.5)]. FS Date: 8/17/2016



View of pipe on WS with rip rap on toe--dense vegetation on slope.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.48	Rating **	М	Issue No.		27 (cont)	
LM End	0.48	Issue Type +	En	Location *	WS		
Category Supplemental			GPS Latitude/Longitude				
			Start		End		
Item	DWR UC	P Field Study		38.3204	76°	38.320476°	
пеш		,		-121.5786	16°	-121.578616°	
DWR ID						·	
	Comment Code						

# Inspector Comment

FS\_ID:50062 DS\_ID:24139 EP\_NO: 951

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Meet Fred Wheeler with RD349 at this crossing. Crossing is active. Crossing was downgraded from Urgent to Non-Urgent -- no signs of pipe failure visible on surface. Need to contact owner -- dense vegetation on WS and LS should be cleared prior to next inspection. Need to coordinate with owner regarding the 8inch sleeved pipe--need permit number to update record. (DWR UCIP omagana)3/18/2009 Exposed section of levee slope on LS--need to contact owner and DWR inspector. Burrow activity noticed at crossing 10 inch holes. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: 8-inch steel pipe measured (instead of 10inch) sleeved through a 12-inch steel pipe, 6.6 feet below the crown. Annular gap grouted at both ends. Active centrifugal pump on platform at landside (LS) toe. Inactive slant pump on steel platform on waterside slope (not present in 2008 referenced in USACE O&M manual). Exposed section pipe on WS slope. Service pole on the LS slope. (10inch pipe sleeved through pre-existing 12-pipe under Permit No. 3382, 1960 - Davis J. Eliot and Son; 12-inch pipe authorized in under Permit No. 951, 1944 - Stillwater Orgards Company). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual Unit No. 110, May 1959, (HLM 0.5)]. FS Date: 8/17/2016

Photo 2 of 2 : UCIP\_FA\_2016\_50062\_36546.jpg



View of pipe on LS--open cut section.

# Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.88	Rating **	М	Issue No. 22		22	
LM End	0.88	Issue Type +	En	Location *	WS		
Category	Supplemental				GPS Latitude/Longitude		
Calegory	Category					End	
Item	DWR UCI	P Field Study		38.31467	72 °	38.314672	0
пеш	m e			-121.57910	)2 °	-121.579102	0
DWR ID							
Comment Code							

# Inspector Comment

FS\_ID:21572 DS\_ID:24521 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No records were found during intial desk study--need to contact owner to obtain permit number authorizing work. If crossing is no longer used by owner, the owner will need to coordinate with DWR Inspector and CVFPB to remove crossing according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch pipe through the levee, 13.9 feet below the crown. Pump on platform at landward toe. Service pole on landward slope. FS Date: 3/18/2009

LM Start	0.88	Rating **	М	Issue No.	22 (cont)
LM End	0.88	Issue Type +	En	Location *	WS



View of pipe crossing located on waterward side--dense vegetation on levee slope.

#### Photo 2 of 2: UCIP\_FA\_2016\_21572\_36573.jpg



Pump house located on landward side at toe.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.03	Rating **	М	Issue No.		26
LM End	1.03	1.03 Issue Type + En I		Location *	Location *	
Supplemental		Supplemental				e/Longitude
Calegory	Category					End
Item	DWR UCI	P Field Study	38.3124	96°	38.312496 °	
пеш					25 °	-121.578625 °
DWR ID						·

# Inspector Comment

Comment Code

FS\_ID:50013 DS\_ID:24140 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Crossing has been downgraded from Urgent to Non-Urgent no signs of pipe failure were visible during site inspection. Minor erosion visible on LS shoulder covered by dry leaves. No permit was found--need to contact owner to determine age of crossing and determine when the last internal inspection was completed. (DWR UCIP - omagana)8/13/2009 Exposed section of levee slope on LS--need to contact owner and DWR inspector. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 14-inch pipe (waterside (WS) shoulder) and 12-inch pipe (landside (LS) shoulder) through the levee, 4.7 feet below the crown. Gate valve on the WS slope. Pump in pumphouse on LS slope. Pressure breaker behind pumphouse. Pipe exposed on WS slope. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual Unit No. 110, May 1959, HLM 1.1]

FS Date: 8/17/2016

LM Start	1.03	Rating **	М	Issue No.	26 (cont)
LM End	1.03	Issue Type +	En	Location *	WS



View of pipe on WS.

#### Photo 2 of 2: UCIP\_FA\_2016\_50013\_36558.jpg



View of LS slope--open cut.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.06 Rating ** U		Issue No.		16	
LM End	1.24	Issue Type +	En	Location *	ı* LS	
Category	evee	GPS Latitude/Longitude				
Calegory	negory					End
Item	Vegetatio	n		38.3119	92°	38.309635 °
item				-121.5784	60°	-121.577285 °
DWR ID DWR_RD0349_01_f _ 2016_16						
Comment Code						

V6: Landscaping

#### Inspector Comment

The landscaping along levee mile 1.06-1.24 is unmaintained and completely blocking the view of landside levee slope.



RD 349 Unit 1 levee mile 1.06-1.24 unmaintained landscaping

LM Start	1.19	Rating ** M		Issue No.		25
LM End	1.19	Issue Type +	Issue Type + En I			LS
Category	Suppleme	GPS Latitude/Longitude				
Calegory	Category					End
Item	DWR UCI	DWR UCIP Field Study				38.310287°
item					69 °	-121.577669°
DWR ID						·

# Comment Code Inspector Comment

FS\_ID:44304 DS\_ID:24141 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 2007 DWR erosion repair site location?--need to find out fate of crossing. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*ABANDONED\* Pumphouse at landward toe. Pressure breaker on landward side. Electromagnetic Survey indicated a crossing at this location as well.

FS Date: 4/2/2015



Geotech fabric and protective frame at tree--design features of erosion repair site 2007-2009.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.19	1.19 Rating ** M		Issue No.		25 (cont)
LM End	1.19	Issue Type +	En	Location *	tion * LS	
Category Supplemental				GPS Latitude/Longitude		
Calegory	egory					End
Item	DWR UC	P Field Study		38.3102	87°	38.310287°
пеш				-121.5776	69°	-121.577669°
DWR ID						
Comment Code						

# Inspector Comment

FS\_ID:44304 DS\_ID:24141 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 2007 DWR erosion repair site location?--need to find out fate of crossing. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*ABANDONED\* Pumphouse at landward toe. Pressure breaker on landward side. Electromagnetic Survey indicated a

crossing at this location as well.

FS Date: 4/2/2015



Pumphouse on LS toe (From google view)

LM Start	1.24	Rating **	М	Issue No. 10		10
LM End	1.53	Issue Type +	Ma	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Category	ategory					End
Item	Trim / Thi	n Trees		38.3096	35°	38.305938°
item				-121.57729	90°	-121.574802 °
DWR ID	DWR ID DWR_RD0349_01_f _ 2014_10					
Comment Code						

T1 : Trim trees to at least five feet above ground level.

#### Inspector Comment

Thin the tree growth so the slope can be seen during inspection.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.46	Rating **	М	Issue No.		23	
LM End	1.46	Issue Type +	En	Location *	LS		
Category			GPS Latitude/Longitude				
Calegory	gory			Start		End	
Item	DWR UCIP Field Study		38.30676	60°	38.306760	0	
пеш				-121.57531	12°	-121.575312	0
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:44214 DS\_ID:24143 EP\_NO: 12005

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe open on WS slope. 2007 Erosion Repair Site location?--Need to contact owner to determine if crossing is still in use. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 6-inch steel irrigation pipe, 4.0 feet below the crown. Siphon breaker and protective housing at levee shoulder. Pump on waterward side. Pipe exposed on waterward slope, extending to pump. Discharge structure at landward toe. (Permit No. 12005-1977) FS Date: 4/2/2015

LM Start	1.46	Rating **	М	Issue No.	23 (cont)
LM End	1.46	Issue Type +	En	Location *	LS



View of landward side.

#### Photo 2 of 2: UCIP\_FA\_2016\_44214\_36571.jpg



Pipe located on landward side--unable to determine whether it belongs to crossing.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.53	Rating **	М	Issue No.	21			
LM End	1.56	Issue Type +	Ма	Location *	WS			
Category	Catagoni Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	Vegetatio	Vegetation		38.30588	3°	38.305450°		
пеш				-121.57476	5°	-121.574657°		
DWR ID DWR_RD0349_01_f _ 2015_21								
Comment Code								

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Remove the growth from the landside slope.

Photo 1 of 1 : FA 2016	BD0340 204	12 20160013	00002 ina
FIIOLO I OI I . FA ZUIO	ND0348 204	12 20100313	00002.jpg

No Photos



Looking downstream at levee mile 1.55 unauthorized block wall placed on landward levee section, no CVFPB Permit.

LM Start	1.54	Rating **	U	Issue No.		12	
LM End	1.54	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.3057	22°	38.305722°	
пеш				-121.5746	80°	-121.574695°	
DWR ID	DWR ID DWR_RD0349_01_f _ 2014_12						
		Comn	nent Coc	de			
RW : Reta	ining Wall						
Inspector Comment							
This issue	This issue is under review with the CVFPB.						

LM Start	1.56	Rating **	U	Issue No.		13	
LM End	1.58	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Vegetation		38.305450 °		38.305162°		
пеш				-121.5746	87°	-121.574750°	
DWR ID DWR_RD0349_01_f _ 2014_13							
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

# Inspector Comment

This Arundo present on the waterward section is blocking the view of the levee section. Remove it from the shoulder and slope.



RD 349 Unit 1 waterside shoulder and slope.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable M: Not Inspected/Rated M: Minimally Acceptable U: Unacceptable U: Unacceptable AW: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	1.59	09/29/2016 09/29/2016	Herman Phillips

# **Unit Cover Sheet**

# Fall 2016 Levee Inspection Results

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles
Unit No. 02 Steamboat Slough	Right	4.32

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	4/5/2016 - 4/5/2016		9/29/2016 - 9/29/2016	
DWR Inspector	Herman Phillips		Herman Phillips	
Accompanied By	Mr. Fred Wheeler RD 349			

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.00	Rating **	М	Issue No.		97	
LM End	0.00	Issue Type +	En	Location *	LS		
Category	ental	GPS Latitude/Longitude					
				Start		End	
Item	DWR UC	P Field Study		38.30512	24 °	38.305124°	
пеш				-121.57477	'2 °	-121.574772°	
DWR ID							
	Comment Code						

#### Inspector Comment

FS\_ID:46168 DS\_ID:25096 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to identify permit for crossing.

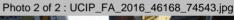
FIELD\_STRUCT\_DESC: 2-inch waterline through the levee at an unknown depth below crown. Pipe provides service to bridge and

beach (per landowner). FS Date: 4/9/2015

LM Start	0.00	Rating **	М	Issue No.	97 (cont)
LM End	0.00	Issue Type +	En	Location *	LS



Cut in pavement good indicator of pipe location.





Christy box on WS shoulder.

# Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.01	Rating **	U	Issue No.		4
LM End	0.01	Issue Type +	En	Location * WS		WS
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory	tegory					End
Item	Encroachi	ments		38.3048	70°	38.304870 °
пеш				121.5747	30°	121.574730 °
DWR ID DWR_RD0349_02_s _ 2012_4						

# Comment Code

BU: Building

#### Inspector Comment

This encroachment is along the waterward shoulder and was not authorized by the CVFPB. There are multiple encroachments at this site. Owner was working with CVFPB to get permits as of 11-2013. This issue is still pending as of 2016.

LM Start	0.01	Rating **	U	Issue No.	4 (cont)
LM End	0.01	Issue Type +	En	Location *	WS

# Photo 1 of 2: FA\_2016\_RD0349\_205\_4\_20160913\_00005.jpg



Unauthorized building waterside shoulder; Unit 2 Sutter Slough.

#### Photo 2 of 2: FA\_2016\_RD0349\_205\_4\_20160913\_00006.jpg



Unauthorized fence adjacent to building waterside Sutter Slough.

LM Start	0.03	Rating **	U	Issue No.		34
LM End	1.31	Issue Type +	Ma	Location *	LS	
Category	evee	GPS Latitude/Longitude				
Calegory						End
Item	Vegetatio	n		38.304993°		38.289043°
пеш				-121.5751	60°	-121.584015 °
DWR ID DWR_RD0349_02_f _ 2016_34						
Comment Code						

V1: Control annual grass and weeds on the levee slopes and easements.

#### Inspector Comment

Control the unwanted vegetation on the landside levee slope.

#### Photo 1 of 1: FA\_2016\_RD0349\_205\_34\_20161003\_00077.jpg



RD 349 Unit 2 landside slope.

\* Location + Issue Type Ma : Maintenance Deficiancy N/A: Not Applicable LS: Land Side : Acceptable : Minimally Acceptable N : Not Inspected/Rated WS: Water Side C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.04	Rating **	М	Issue No.		98	
LM End	0.04	Issue Type + En Location *		Location *		LS	
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		38.30488	5 °	38.304885 °	
пеш				-121.57536	9°	-121.575369 °	
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:46169 DS\_ID:25098 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so

properly. Need to identify permit.

FIELD\_STRUCT\_DESC: 1-inch waterline through the levee 1.5-feet

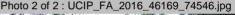
below the crown. Pipe visible at fence on WS slope.

FS Date: 4/9/2015

LM Start	0.04	Rating **	М	Issue No.	98 (cont)
LM End	0.04	Issue Type +	En	Location *	LS



Pipe visible at base of fence on WS shoulder.





Fence on WS shoulder.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.05	Rating **	U	Issue No.		44	_
LM End	0.57	Issue Type +	Ma	Location *	WS		
Catagoni Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
ltom	Vegetatio	n		38.3048	63°	38.299367	0
пеш	Item					-121.581493	D
DWR ID DWR_RD0349_02_s _ 2016_44							
	Comment Code						

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Unwanted tall weeds and small trees present on the water side slope need to be removed.



RD349 Unit 2 looking downstream from the wateside ahoulder and levee slope.

LM Start	0.10	Rating **	М	Issue No.		88
LM End	0.10	Issue Type +	En	Location *		WS
Category				GPS Latitude/Longitude		
Category	Calegory			Start		End
Item	DWR UCI	IP Field Study		38.3046	06°	38.304606°
item				-121.5763	23°	-121.576323°
DWR ID						·

#### Comment Code

#### Inspector Comment

FS\_ID:21576 DS\_ID:24145 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No connection present--need to contact owner to determine if owner plans to use. If crossing is no longer in use owner will need to coordinate with DWR inspector and CVFPB to remove according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Unable to determine if crossing is in use. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch pipe through the levee, 6.0 feet below the crown. Pump and slide gate on the waterward slope. Concrete pipe riser and distribution box at the landward toe. Service pole and anchor on the landward slope.

FS Date: 3/18/2009

#### Photo 1 of 2: UCIP\_FA\_2016\_21576\_36593.jpg



Dense vegetation on waterward slope--2 pipes and 1 conduit.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.10	Rating **	М	Issue No.		88 (cont)		
LM End	0.10	Issue Type +	En	Location *	WS			
Category	ental	GPS Lat	itud	le/Longitude				
Category	Star					End		
Item	DWR UCI	P Field Study		38.30460	6°	38.304606 °		
пеш				-121.57632	3°	-121.576323 °		
DWR ID								
	Comment Code							

#### Inspector Comment

FS\_ID:21576 DS\_ID:24145 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No connection present--need to contact owner to determine if owner plans to use. If crossing is no longer in use owner will need to coordinate with DWR inspector and CVFPB to remove according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Unable to determine if crossing is in use. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch pipe through the levee, 6.0 feet below the crown. Pump and slide gate on the waterward slope. Concrete pipe riser and distribution box at the landward toe. Service pole and anchor on the landward slope.

FS Date: 3/18/2009



Pipes through levee at waterward slope.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.10	Rating **	М	Issue No.		89		
LM End	0.10	Issue Type +	En	Location *		WS		
Category	GPS La	titud	le/Longitude					
Calegory				Start	End			
Item	DWR UCI	P Field Study		38.30460	06°	38.304606°		
пеш				-121.57632	23 °	-121.576323°		
DWR ID								
Comment Code								

#### Inspector Comment

FS\_ID:21577 DS\_ID:24146 EP\_NO: 2480

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Unable to determine if crossing is in use. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 10-inch steel pipe through the levee, 6.0 feet below the crown. Pump and slide gate on the waterward slope. Concrete pipe riser and distribution box with gate valve at the landward toe. Service pole and anchor on the landward slope. (Permit No. 2480-1959)

FS Date: 3/18/2009

LM Start	0.10	Rating **	M	Issue No.	89 (cont)
LM End	0.10	Issue Type +	En	Location *	WS



Dense vegetation on wateward slope-2 pipes and 1 conduit.

#### Photo 2 of 2: UCIP\_FA\_2016\_21577\_36596.jpg



View of waterward side--pump and raised platform.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.11	Rating **	М	Issue No.		46				
LM End	0.11	Issue Type +	En	Location *		LS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Calegory				Start		End				
Item	Encroachi	ments		38.3044	50°	38.304450°				
пеш				-121.576562 °		-121.576562°				
DWR ID	DWR ID DWR_RD0349_02_s _ 2016_46									
		Comn	nent Cod	de						
EQ : Equip	ment									
		Inspecto	or Comm	nent						
Remove the equipment away from the levee toe.										

No Photos

Rating \*\* Issue No. LM Start 0.12 Μ 6 Issue Type + En Location \* LS LM End 0.12 Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.304443° 38.304443° -121.576687 -121.576687 ° DWR ID DWR\_RD0349\_02\_f \_ 2013\_6 Comment Code DE: Debris Inspector Comment Remove the trash from the levee section.

No Photos

CR : Crown

# Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.13	Rating **	М	Issue No.	93			
LM End	0.13	Issue Type +	En	Location *	LS			
Supplemental				GPS Lat	tituc	le/Longitude		
Calegory	Category					End		
Item	DWR UCI	P Field Study		38.30434	5°	38.304345	0	
пеш				-121.57682	4°	-121.576824	0	
DWR ID								
	Comment Code							

# Inspector Comment

FS\_ID:21613 DS\_ID:24147 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 3-inch pipe through the levee, 3.3 feet below the crown. Gate valve on landward side. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.1).

FS Date: 3/18/2009

LM Start	0.13	Rating **	М	Issue No.	93 (cont)
LM End	0.13	Issue Type +	En	Location *	LS



Underground service alert (USA) marking on levee crown.

#### Photo 2 of 2: UCIP\_FA\_2016\_21613\_36687.jpg



View of crossing on landward side.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.16	Rating **	М	Issue No.		73					
LM End	0.16	Issue Type +	En	Location *		LS					
Category	Earthen L	evee		GPS La	atitud	e/Longitude					
Category			Start		End						
Item	Encroachments				17°	38.304117 °					
пеш			-121.5772	63 °	-121.577263 °						
DWR ID	DWR_RD0	349_02_s _ 201	4_73								
		Comn	nent Coo	de							
MA : Mate	rial										
		Inspecto	or Comm	nent							
Remove th	Remove the mateial from the landside levee section.										

No Photos

Rating \*\* Issue No. LM Start 0.21 Μ 0.25 Issue Type + En Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 38.303673° 38.303303° -121.578065 ° -121.578695 ° DWR ID DWR\_RD0349\_02\_s \_ 2012\_7 Comment Code

V6: Landscaping

Inspector Comment

The landscaping should be maintained or removed from the landside levee slope and shoulder.

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.28	Rating **	М	Issue No.		94	
LM End	0.28	Issue Type +	En	Location *		LS	
Supplemental				GPS Lat	tud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.30307	2°	38.303072	0
пеш				-121.57906	6°	-121.579066	0
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:21614 DS\_ID:24148 EP\_NO: 12006

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Altered crossing--contact owner to obtain new permit authoring work. Debris remains on site. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 6-inch steel irrigation pipe through the levee, 4.0 feet below the crown. 3-inch conduit through levee to service pump. Steel cutoff wall around pipe at center of levee. Siphon breaker in concrete riser at landward shoulder. Gate valve on landward side. Pump on concrete pad on waterward slope. Discharge structure at landward toe. (Permit No. 12006-1977) FS Date: 3/18/2009

Rating \*\* Issue No. LM Start 0.28 Μ 94 (cont) 0.28 Issue Type + En Location \* LS LM End



View of landward side--unable to inspect.



Photo 2 of 2: UCIP\_FA\_2016\_21614\_36690.jpg



Crossing has been altered--abandoned pipe through levee slope remains

Location + Issue Type Ma : Maintenance Deficiancy N/A: Not Applicable LS: Land Side Acceptable N : Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob : Design & System Obsolescence CR : Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.34	Rating **	М	Issue No.		9	
LM End	0.39	Issue Type +	Ma	Location *		WS	
Category Supplemental			GPS La	atitud	e/Longitude		
Calegory			Start		End		
Item		CE Erosion S	Survey,	38.3023	58°	38.301772°	
пеш	DRAFT			-121.5797	07°	-121.580093°	
DWR ID DWR_RD0349_02_s _ 2016_9							
	Comment Code						

# Inspector Comment

2007 - Slow erosion, probably due to wave wash and fluvial erosion. Site has likely been here for awhile but was unseen due to boats parked in front. 2015: Large tree popout, scarp reaches crown of levee. [2015 Site ID: STM\_25-8\_R]



USACE 2013 Photo #1

LM Start	0.45	Rating **	М	Issue No.		49
LM End	0.46	Issue Type +	Ma	Location *		LS
Catagori Earthen Levee				GPS La	atitud	le/Longitude
Category				Start		End
Item	Trim / Thi	n Trees		38.3009	90°	38.300853 °
item				-121.5806	78°	-121.580748°
DWR ID DWR_RD0349_02_s _ 2016_49						

Comment Code

T2: Thin trees to allow visibility of the ground and room to flood fight.

#### Inspector Comment

Thin out the trees to allow the slope to be seen.

No Photos

LM Start	0.57	Rating **	M	Issue No.	62		
LM End	3.50	Issue Type +	Ma	Location *		WS	
Earthen Levee				GPS La	atitud	e/Longitude	
Category			Start		End		
Item	Vegetatio	n		38.2993	67°	38.262782	0
item				-121.5814	90°	-121.591812	0
DWR ID	DWR_RD0	349_02_f _ 201	4_62				

Comment Code

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Remove the unwanted vegetation from the waterside slope.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.57	Rating **	М	Issue No.		95		
LM End	0.57	Issue Type + En		Location *		WS		
Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		38.29935	3°	38.299353	0	
пеш				-121.58152	5 °	-121.581525	0	
DWR ID								

# Inspector Comment

Comment Code

FS\_ID:21615 DS\_ID:24149 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner (Permit No. 3678) to determine if crossing is still in use. If crossing is not in use will need to coordinate with DWR Inspector and CVFPB to remove pipe according to Title 23 requirements. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 6-inch irrigation pipe through the levee, 2.5 feet below the crown. Pump on waterward slope. Service pole at landward shoulder. 3-inch conduite through levee to service pump. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.6). Pump replaced and placed on concrete pad on waterward slope under Permit No. 3678 (1961). FS Date: 3/18/2009

LM Start	0.57	Rating **	M	Issue No.	95 (cont)
LM End	0.57	Issue Type +	En	Location *	WS



View of pipe and pump on waterward side.

#### Photo 2 of 2: UCIP\_FA\_2016\_21615\_36695.jpg



View of landard shoulder--service pole and pipe section through slope.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.60	Rating **	М	Issue No.	13		
LM End	0.72	Issue Type +	Ma	Location *	WS		
Supplemental				GPS La	atitud	le/Longitude	
Calegory			End				
Item		CE Erosion S	Survey,	38.2988	97°	38.297384°	
item	DRAFT			-121.5815	71 °	-121.582176°	
DWR ID DWR_RD0349_02_s _ 2016_13							
	Comment Code						

#### Inspector Comment

2010 - Small maintenance, erosion into the toe. 2011 - Minor new erosion at toe. 2015: Minor new erosion at toe, new tree popout. [2015 Site ID: STM\_25-5\_R]



USACE 2013 Photo #1

LM Start	0.82	Rating **	М	Issue No.		67		
LM End	0.83	Issue Type +	En	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
Calegory				Start		End		
Item	Encroach	ments		38.2960	05°	38.295862 °		
пеш				-121.582838 ° -1				
DWR ID DWR_RD0349_02_s _ 2012_67						·		
	Comment Code							

MA: Material

Inspector Comment

Remove the material from the landward slope.

No Photos

LM Start	0.83	Rating **	М	Issue No.		12
LM End	0.89	Issue Type +	En	Location *		LS
Catagory	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory	Category					End
Vegetation		38.295753°		38.294985°		
пеш				-121.5828	38°	-121.583147°
DWR ID	DWR_RD0	349_02_s _ 201	12_12			
		Comn	nent Cod	de		
V6 : Lands	scaping					

Inspector Comment

The landscaping should be maintained.

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.06	Rating **	М	Issue No.		35	
LM End	1.06	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachments			38.292557°		38.292557 °	
пеш	item			-121.583875 °		-121.583875 °	
DWR ID	DWR ID DWR_RD0349_02_f _ 2016_35						
		Comn	nent Cod	de			
PI : Pipe							
Inspector Comment							
Old irrigation discarted pipe on landside slope need to be removed.							



RD 349 Unit 2 levee mile 1.06 landside toe.

LM Start	1.08	Rating **	U	Issue No.		36		
LM End	1.08	Issue Type +	Ma	Location *		WS		
Catagory	Cotogon Earthen Levee			GPS Latitude/Longitude				
Category			Start		End			
Item	Erosion /	Bank Caving		38.2923	80°	38.292282 °		
itein			-121.583963 °		-121.583958°			
DWR ID DWR_RD0349_02_f _ 2016_36								
		_						

#### Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Land owner damaged the slope waterside. The damage need to be repaired soon as possible.

LM Start	1.08	Rating **	U	Issue No.	36 (cont)
LM End	1.08	Issue Type +	Ma	Location *	WS

# Photo 1 of 3: FA\_2016\_RD0349\_205\_36\_20161003\_00079.jpg



RD 349 Unit 2 waterside slope and berm Land owner has dug a pit.

Photo 2 of 3: FA\_2016\_RD0349\_205\_36\_20161003\_00084.jpg



Wind blind dug into the waterside berm lining the pit.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.08	Rating **	U	Issue No.		36 (cont)	
LM End	1.08	Issue Type +	Ma	Location *	WS		
Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Erosion / Bank Caving			38.2923	80°	38.292282 °	
пеш				-121.5839	63°	-121.583958°	
DWR ID DWR_RD0349_02_f _ 2016_36							
		Comn	nent Cod	de			
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.	
		Inspecto	or Comm	nent			
Inspector Comment  Land owner damaged the slope waterside. The damage need to be repaired soon as possible.							

Photo 3 of 3: FA\_2016\_RD0349\_205\_36\_20161003\_00088.jpg



The landowner has knotched step into the waterside slope.

LM Start	1.31	Rating **	М	Issue No.		18	
LM End	1.33	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Vegetatio		38.2889	13°	38.288745°		
пеш				-121.5839	33°	-121.583938°	
DWR ID DWR_RD0349_02_s _ 2012_18							
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

The landscaping is in need of maintenance to remove the wild growth.

No Photos

# Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.33	Rating **	U	Issue No.		10		
LM End	1.49	Issue Type +	Ma	Location *	WS			
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Item	2015 USACE Erosion Survey,			38.2887	27°	38.286475	0	
пеш	DRAFT			-121.5838	23 °	-121.585026	0	
DWR ID	DWR_RD0349_02_s _ 2016_10							
Comment Code								

#### Inspector Comment

1997 - Erosion of very sandy levee behind large stand of riparian vegetation on top right bank. Dry ravel of sand. 1999 - Quarry waste rock was dumped down the levee slope; poor repair job; still eroding in places. Eroding at midslope off fabric. 2005 - Length revised, only the middle 150 - 200 ft are eroding. 2006 - Some rock/small material dumped down the bank but it is slowly unraveling. Upstream end is unraveling faster. Steep slope with poor gradation so fines are washing out. 2010 - Lots of overhanging trees and erosion pockets. 2011 - This site is upgraded to CRITICAL. Near vertical bank at the downstream end. New erosion at various locations throughout the site. 2015: No observed changes. [2015 Site ID: STM\_24-7\_R]

# Photo 1 of 1 : FA\_2016\_RD0349\_205\_10\_20160913\_00008.jpg

USACE 2013 Photo #1

LM Start	1.33	Rating **	U	Issue No.		56
LM End	2.36	Issue Type +	Ma	Location *		LS
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Vegetation			38.2887	18°	38.275795°
item				-121.5840	42 °	-121.591430°
DWR ID	DWR_RD0	349_02_s _ 201	6_56			

Comment Code
V7 : Trees / Woody Vegetation

#### Inspector Comment

Remove this unwanted woody tree growth and wild vegetation from the levee slope landward.

#### Photo 1 of 1 : FA\_2016\_RD0349\_205\_56\_20161003\_00089.jpg



Looking downstream from levee mile 1.33 to 2.36.

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# Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.38	Rating **	М	Issue No.		86	
LM End	1.38	Issue Type +	En	Location *	LS		
Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	P Field Study		38.2879	25 °	38.287925 °	
пеш				-121.5840	63°	-121.584063 °	
DWR ID	DWR ID						
Comment Code							

#### Inspector Comment

FS\_ID:21606 DS\_ID:24154 EP\_NO: 6274

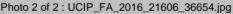
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing appears to have been altered--recommend coordinating with owner to determine records for crossing. Will need permit issued for pipe install. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 12-inch pipe through the levee, 3.0 feet below the crown. Cutoff wall around pipe at waterward shoulder. Siphon breaker at landward shoulder. Air vent and pressure breaker on waterward slope. Slant pump on the waterward slope. Concrete distribution box at landward toe. (Permit No. 6274-1974) FS Date: 3/18/2009

LM Start	1.38	Rating **	М	Issue No.	86 (cont)
LM End	1.38	Issue Type +	En	Location *	LS



View of abandoned framing Icoated on river's edge.





Smaller pipe sleeved through larger pipe that goes through levee.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.62	Rating **	М	Issue No.	87		
LM End	1.62	Issue Type +	En	Location *	LS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category					End	
Item	DWR UCIP Field Study			38.2855	73 °	38.285573°	
пеш				-121.58698	36°	-121.586986 °	
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:21607 DS\_ID:24155 EP\_NO: 1116

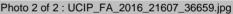
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 8-inch steel irrigation pipe through the levee, 4.7 feet below the crown. Two concrete cutoff walls under each shoulder. Pressure breaker in concrete riser at levee shoulder. Pump on waterward side. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.7). Pipe reconstructed under Permit No. 1116 (1974). FS Date: 3/18/2009

LM Start	1.62	Rating **	М	Issue No.	87 (cont)
LM End	1.62	Issue Type +	En	Location *	LS



View of waterward side.





Pipe at the waterward toe.

# Levee Inspection Report By Mile - Fall 2016

#### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.83	Rating **	М	Issue No.		91		
LM End	1.83	Issue Type +	En	Location *		LS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Itom	Item DWR UCIP Field Study			38.28323	8°	38.283238 °		
пеш				-121.58933	7°	-121.589337 °		
DWR ID						·		

# Inspector Comment

Comment Code

FS\_ID:21608 DS\_ID:24156 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

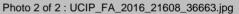
FIELD\_STRUCT\_DESC: 10-inch pipe through the levee, 3.9 feet below the crown. Siphon breaker in concrete riser on the landward shoulder. Pump and gate valve in pumphouse on the waterward slope. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.9).

FS Date: 3/18/2009

LM Start	1.83	Rating **	М	Issue No.	91 (cont)
LM End	1.83	Issue Type +	En	Location *	LS



View of pipe on waterward slope.





View of pipe daylight at shed on waterward side.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.04	Rating **	М	Issue No.	19		
LM End	2.05	Issue Type +	Ma	Location *	WS		
Supplemental				GPS La	atitud	e/Longitude	
Category		Start		End			
Item	2015 USA	Survey,	38.2800	69°	38.279919°		
item	DRAFT			-121.5894	43°	-121.589438 °	
DWR ID	DWR_RD0	349_02_s _ 201	6_19				
		Comn	nent Cod	de			
		Inspecto	or Comm	ent			

#### Inspector Comment

2011 - Small scallop caused by erosion and wave wash. 2015: No observed changes. [2015 Site ID: STM\_24-1\_R]



USACE 2013 Photo #1

LM Start	2.11	Rating **	М	Issue No.	No. 16			
LM End	2.14	Issue Type +	Ma	Location *		WS		
Category				GPS Latitude/Longitude				
Calegory	negory					End		
Item		ACE Erosion S	Survey,	38.2790	17°	38.278597°		
пеш	DRAFT			-121.5896	15 °	-121.589854°		
DWR ID DWR_RD0349_02_s _ 2016_16								
	Comment Code							

### Inspector Comment

1997 - Top right bank has retreated into the levee. Site is between two rock sites. 1999 - Downstream half of the reach repaired with rock. 2000 - Trees leaning into the water. 2010 - Site appears worse. 2011 - New erosion at the toe. 2013 - Short vertical sections observed at upstream end. 2015: Minor new erosion. [2015 Site ID: STM\_23-9\_R]

# Photo 1 of 1 : FA\_2016\_RD0349\_205\_16\_20160913\_00011.jpg



USACE 2013 Photo #1

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.15	Rating **	М	Issue No.	90				
LM End	2.15	Issue Type +	En	Location *	WS				
Category	Suppleme	upplemental			GPS Latitude/Longitude				
Category			Start End						
Item	DWR UCI	P Field Study		38.27868	2 °	38.278682 °			
пеш				-121.59010	4 °	-121.590104 °			
DWR ID	DWR ID								
	Comment Code								

# Inspector Comment

FS\_ID:21609 DS\_ID:24157 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Debris scattered--need to contact owner. If crossing is not in used will need to coordinate with DWR Inspector and CVFPB to remove per Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 8-inch pipe sleeved through 12-inch pipe through the levee, 4.0 feet below the crown. Annular gap not grouted. Service pole on the waterward shoulder. Pump on the waterward side. Concrete distribution box at landward toe. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.3).

LM Start	2.15	Rating **	М	Issue No.	90 (cont)
LM End	2.15	Issue Type +	En	Location *	WS



Inside view of distribution box located on landward side.

Photo 2 of 2: UCIP\_FA\_2016\_21609\_36667.jpg



Debris along pipe alignment.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence C: Enforcement

\* Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.36	Rating **	U	Issue No. 64		64	
LM End	4.30	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Vegetatio	n		38.2757	95 °	38.254703 °	
пеш				-121.5914	28°	-121.599703 °	
DWR ID DWR_RD0349_02_s _ 2016_64							
	Comment Code						

V2 : Remove the wild growth other than native grasses from the levee slopes

### Inspector Comment

The wild weeds on the landside slope and toe needs to be removed.

# Photo 1 of 1: FA\_2016\_RD0349\_205\_64\_20161017\_00091.jpg



RD 349 Unit 2 looking downstream from levee mile 2.36 landside slope and toe.

LM Start	2.39	Rating **	М	Issue No.		96
LM End	2.39	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	IP Field Study		38.2754	93°	38.275493 °
item				-121.5912	08°	-121.591208°
DWR ID						

### Comment Code

### Inspector Comment

FS\_ID:39873 DS\_ID:24158 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limit the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 12-inch pipe through the levee, 4.0 feet below the crown. Pump on pile structure on waterward side, walkway to pump. Concrete distribution box and power pole with anchor at landward toe. Concrete standpipe on landward side. (Permit No. 946, 1944). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.5). FS Date: 3/18/2009

### Photo 1 of 2: UCIP\_FA\_2016\_39873\_36678.jpg



View of waterward side--pump and control panel located on raised platform.

CR : Crown

LS: Land Side WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.39	Rating **	М	Issue No.		96 (cont)	
LM End	2.39	Issue Type +	En	Location *	LS		
Category	ental	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UCI	P Field Study		38.27549	3°	38.275493°	
пеш				-121.59120	8°	-121.591208°	
DWR ID	DWR ID						
	Comment Code						

### Inspector Comment

FS\_ID:39873 DS\_ID:24158 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limit the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 12-inch pipe through the levee, 4.0 feet below the crown. Pump on pile structure on waterward side, walkway to pump. Concrete distribution box and power pole with anchor at landward toe. Concrete standpipe on landward side. (Permit No. 946, 1944). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.5).

FS Date: 3/18/2009



Overview of waterward side--dense vegetation limits slope inspection.

LM Start	2.39	Rating **	U	Issue No.		1
LM End	2.39	Issue Type +	En	Location *		WS
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Encroach	ments		38.2754	03 °	38.275403°
пеш				-121.5912	29°	-121.591229°
DWR ID	DWR_RD0	349_02_f _ 201	3_1			

### Comment Code

ST : Stairway

### Inspector Comment

The landowner has installed steps on the waterside slope and has an unauthorized boat dock anchored to the waterside slope.

# Photo 1 of 3: FA\_2016\_RD0349\_205\_1\_20161017\_00092.jpg



Unauthorized metal steps on the waterside levee slope at levee mile 2.39.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.39	Rating **	U	Issue No.	1 (cont)			
LM End	2.39	Issue Type +	En	Location *	WS			
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroach	ments		38.2754	03 °	38.275403	0	
item				-121.5912	29°	-121.591229	0	
DWR ID DWR_RD0349_02_f _ 2013_1								
Comment Code								

### ST : Stairway

### Inspector Comment

The landowner has installed steps on the waterside slope and has an unauthorized boat dock anchored to the waterside slope.

LM Start	2.39	Rating **	U	Issue No.	1 (cont)
LM End	2.39	Issue Type +	En	Location *	WS



Unauthorized metal steps on the waterside slope levee mile 2.39.

Photo 3 of 3: FA\_2016\_RD0349\_205\_1\_20161017\_00093.jpg



Unauthorized dock at waterside toe.

LM Start	2.56	Rating **	М	Issue No.	3				
LM End	2.69	Issue Type +	Ма	Location *	WS				
Category	Suppleme	ental		GPS Latitude/Longitude					
Calegory	Start End								
Item		CE Erosion S	Survey,	38.27385	54°	38.271998°			
пеш	DRAFT			-121.58874	45 °	-121.589424°			
DWR ID DWR_RD0349_02_s _ 2016_3									
	Comment Code								

### Inspector Comment

2011 - Toe scour at the tidal zone. 2015: New tree popout and minor new erosion. [2015 Site ID: STM\_23-6\_R]

# Photo 1 of 2: FA\_2016\_RD0349\_205\_3\_20160913\_00003.jpg



USACE 2013 Photo #1

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.56	Rating **	М	Issue No.	3 (cont)		
LM End	2.69	Issue Type +	Ma	Location *	WS		
Supplemental				GPS L	atitud	e/Longitude	
Calegory		Start		End			
2015 USACE Erosion Survey,				38.2738	854°	38.271998°	
item	DRAFT					-121.589424°	
DWR ID	DWR_RD0	349_02_s _ 201	6_3				
		Comn	nent Cod	de			
Inspector Comment							
2011 - Toe scour at the tidal zone 2015: New tree popult and minor							

2011 - Toe scour at the tidal zone. 2015: New tree popout and minor new erosion. [2015 Site ID: STM\_23-6\_R]



USACE 2013 Photo #2

LM Start	2.93	Rating **	ing ** M Issue No.		100	
LM End	2.93	Issue Type +	En	Location *		WS
Category	Suppleme		GPS La	atitud	e/Longitude	
Category			Start		End	
Item	DWR UCI	IP Field Study		38.2686	74°	38.268674°
пеш				-121.5894	19°	-121.589419°
DWR ID						

# Inspector Comment

Comment Code

FS\_ID:44328 DS\_ID:24159 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned and should be done so

properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch pipe through the levee, 1.5 feet below the crown. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.1). FS Date: 4/8/2015



Pipe visible in water at WS toe.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.93	Rating **	М	Issue No.	100 (cont)				
LM End	2.93	Issue Type +	En	Location *	WS				
Category	Suppleme	ental	GPS Latitude/Longitude						
Category				Start		End			
Item	DWR UCI	DWR UCIP Field Study				38.268674°			
пеш				-121.58941	9°	-121.589419 °			
DWR ID									
	Comment Code								

### Inspector Comment

FS\_ID:44328 DS\_ID:24159 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned and should be done so

properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch pipe through the levee, 1.5 feet below the crown. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.1). FS Date: 4/8/2015



Pipe visible in water at WS toe.

LM Start	3.00	Rating **	М	Issue No.	66		
LM End	3.03	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Itom	Trim / Thin Trees				10°	38.267280°	
-121.588828 ° -121.588613							
DWR ID DWR_RD0349_02_s _ 2016_66							
Comment Code							

T2: Thin trees to allow visibility of the ground and room to flood fight.

### Inspector Comment

Thin the trees on the landside slope.

No Photos

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.02	Rating **	U	Issue No.		103		
LM End	3.02	Issue Type +	En	Location *		LS		
Category				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	P Field Study		38.26747	'1 °	38.267471 °		
пеш			-121.58865	9°	-121.588659°			
DWR ID								

# Inspector Comment

Comment Code

FS\_ID:50015 DS\_ID:24160 EP\_NO: 655 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/17/2016 Dense vegetation limits the inspector's visibility to inspect levee section along pipe alignment. Previous inspection indicates holes visible on pipe wall. Need to contact owner to notify that pipe needs to be abandoned properly per Title 23 requirements. (DWR UCIP - omagana)4/8/2015 Pipe visible on WS slope and appears to be open. Pipe needs to be properly abandoned or verified as having been done so properly. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel pipe through the levee, 3.7 feet below the crown. Pump on concrete blocks on the waterside (WS) slope. 2-inch galvanized conduit is buried along side of the 6-inch pipe. PG&E service was installed on the landside (LS). (6inch pipe authorized under Permit No. 5350, 1966 - Enver Salman, 6inch pipe replaced previous 8-inch pipe authorized under Permit No. 655, 1935 - M. S. Salman) Unable to confirm if 8-inch pipe is the same pipe listed in the USACE O&M manual as HLM 3.2. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual Unit No. 110, May 1959, HLM 3.2, Drawing No. 50-4-3042]. FS Date: 8/17/2016

LM Start	3.02	Rating **	U	Issue No.	103 (cont)
LM End	3.02	Issue Type +	En	Location *	LS



Abandoned pipe visible on slope in vegetation behind new pipe on WS slope.





Abandoned pipe visible on slope in vegetation behind new pipe on WS slope.

\*Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
N: Not Inspected/Rated
M: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.02	Rating **	М	Issue No.	101			
LM End	3.02	Issue Type +	En	Location *	LS			
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	P Field Study		38.26745	3°	38.267453°		
пеш				-121.58866	8°	-121.588668 °		
DWR ID								
Comment Code								

### Inspector Comment

FS\_ID:44332 DS\_ID:24199 EP\_NO: 5350

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine if crossing is still in use. If crossing is no longer in use owner will need to coordinate with DWR inspector and CVFPB to remove according to Title 23 requirements. Debris scattered on slopes--remove. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Unable to determine if crossing is in use. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

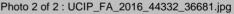
FIELD\_STRUCT\_DESC: 6-inch steel pipe and 2-inch iron electrical conduit through the levee, both 3.7 feet below the crown. Siphon breaker in pipe riser on waterward slope. Pump, switch panel, and butterfly valve on concrete blocks on the waterward slope. Service pole on landward slope (Permit No. 5350-1966).

FS Date: 4/8/2015

LM Start	3.02	Rating **	М	Issue No.	101 (cont)
LM End	3.02	Issue Type +	En	Location *	LS



View of waterward side--control panel, pipe, pump, and butterfly valve on WS slope.





Pipe and Steel riser on WS slope.

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.15	Rating **	М	Issue No.	99			
LM End	3.15	Issue Type +	En	Location *	LS			
Category	Suppleme	GPS Latitude/Longitude						
Calegory	Category			Start		End		
Item	DWR UCI	P Field Study		38.26560	3°	38.265608	5	
пеш			-121.58839	1°	-121.588391	5		
DWR ID								
	Comment Code							

### Comment Code

### Inspector Comment

FS\_ID:46172 DS\_ID:25099 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be verified as

having been done so properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch pipe through the levee,

4.5 feet below the crown. Service pole at landward toe.

FS Date: 4/2/2015

LM Start	3.15	Rating **	М	Issue No.	99 (cont)
LM End	3.15	Issue Type +	En	Location *	LS



Pipe just visible on LS slope.

### Photo 2 of 2: UCIP\_FA\_2016\_46172\_74554.jpg



View of WS from shoulder at crossing. Pipe not found on WS.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.31	Rating **	М	Issue No.		102	
LM End	3.31	Issue Type +	En	Location *	LS		
Catagony	Category Supplemental				GPS Latitude/Longitude		
Calegory						End	
Item	DWR UCI	P Field Study		38.26335	9°	38.263359	0
пеш				-121.58872	1 °	-121.588721	0
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:44333 DS\_ID:24161 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe appears abandoned and if so should be done so

properly.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch pipe through the levee, 4.5 feet below the crown. Pump and switch panel on the waterward slope. Service pole and concrete distribution box at landward toe. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.5).

FS Date: 4/8/2015

LM Start	3.31	Rating **	М	Issue No.	102 (cont)
LM End	3.31	Issue Type +	En	Location *	LS

# Photo 1 of 2 : UCIP\_FA\_2016\_44333\_73713.jpg



Pipe, distribution box, and power pole visible on LS slope/toe.

### Photo 2 of 2: UCIP\_FA\_2016\_44333\_73712.jpg



distribution box and pipe visible on LS toe.

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.38	Rating **	М	Issue No.	11		
LM End	3.49	Issue Type +	Ma	Location *	WS		
Category	Suppleme	ental		GPS L	atitud	e/Longitude	
Calegory				Start		End	
Item	2015 USACE Erosion Survey,			38.2625	10°	38.262533 °	
item	DRAFT			-121.589481 °		-121.591690°	
DWR ID	DWR_RD0	349_02_s _ 201	6_11				
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			

2010 - Slumping sections on the lower bank, appears to be scouring around the trees. 2011 - Soil beach at toe. 2015: No observed changes. [2015 Site ID: STM\_22-8\_R]

# Photo 1 of 1: FA\_2016\_RD0349\_205\_11\_20160913\_00009.jpg



USACE 2013 Photo #1

LM Start	3.58	Rating **	Issue No.		84			
LM End	4.31	Issue Type + Ma		Location *		WS		
Catagory	Earthen Levee				GPS Latitude/Longitude			
Category				Start		End		
ltom	Vegetatio	n		38.2625	88°	38.254733°		
Item			-121.5933	28°	-121.599963°			
DWR ID DWR_RD0349_02_f _ 2015_84								

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Remove the snap grasses from the waterside levee slope.

# Photo 1 of 1: FA\_2016\_RD0349\_205\_84\_20160913\_00022.jpg



Tall snap grasses covering the waterward slope.

LM Start	3.72	Rating **	М	Issue No.		22		
LM End	3.73	Issue Type +	Ma	Location *		WS		
Category Earthen Levee			GPS Latitude/Longitude					
			Start		End			
Encroachments			38.261111 °		38.261001 °			
item					62°	-121.595052 °		
DWR ID	DWR_RD0	349_02_s _ 201	2_22					
Comment Code								
TR : Tree or limb								

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.76	Rating **	U	Issue No.		59			
LM End	3.91	Issue Type +	En	Location *		LS			
Category	Earthen Levee								e/Longitude
Calegory	Category			Start		End			
Item	Encroachments			38.2605	96°	38.258426°			
item			-121.5921	60°	-121.595125°				
DWR ID	DWR_RD0349_02_f _ 2013_59								

# FE : Fence

### Inspector Comment

Comment Code

Inside the fenced off area are several pet shelters and pens for chickens and goats on the landside levee slope and toe. This need to be taken off the levee section. In the event of a flood fight this area would cause delays in response time.

LM Start	3.76	Rating **	U	Issue No.	59 (cont)
LM End	3.91	Issue Type +	En	Location *	LS

# Photo 1 of 4: FA\_2016\_RD0349\_205\_59\_20160913\_00016.jpg



Unauthorized animal storage pens within the landside easement.

### Photo 2 of 4: FA\_2016\_RD0349\_205\_59\_20160913\_00017.jpg



Unauthorized electric wire fence, solid board fence and animal storages within the 10-foot easement landside levee toe.

LM Start	3.76	Rating **	U	Issue No.	59 (cont)
LM End	3.91	Issue Type +	En	Location *	LS





Unauthorized electric fence installed along the landside shoulder and slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.76	Rating **	U	Issue No.	59 (cont)		
LM End	3.91	Issue Type +	En	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Encroach	ments		38.2605	96 °	38.258426 °	
пеш				-121.5921	60°	-121.595125 °	
DWR ID DWR_RD0349_02_f _ 2013_59							
Comment Code							

FE : Fence

### Inspector Comment

Inside the fenced off area are several pet shelters and pens for chickens and goats on the landside levee slope and toe. This need to be taken off the levee section. In the event of a flood fight this area would cause delays in response time.



Unauthorized electric fence installed along the shoulder and levee slope.

LM Start	3.80	Rating **	М	Issue No.		92	
LM End	3.80	Issue Type +	En	Location *		LS	
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	DWR UCI	P Field Study		38.2600	07°	38.260007°	
пеш				-121.5952	73 °	-121.595273°	
DWR ID							

# Comment Code

### Inspector Comment

FS\_ID:21612 DS\_ID:24162 EP\_NO: 8188

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Unable to determine if crossing is in use. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation pipe and 1.25-inch electrical conduit through the levee, both 5.0 feet below the crown. Steel cutoff wall around pipe at center of levee. Siphon breaker on shoulder. Pump and pumphouse on the waterward side. Service pole, discharge box and concrete standpipe at landward toe. (Permit No. 8188-1973)

FS Date: 3/18/2009

### Photo 1 of 2: UCIP\_FA\_2016\_21612\_36684.jpg



Overview of waterward side--2 crossings.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.80 Rating ** M		Issue No.		92 (cont)		
LM End	3.80	Issue Type +	En	Location *		LS	
Category Supplemental				GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Itom	DWR UCIP Field Study			38.26000	7°	38.260007	0
Item				-121.59527	3°	-121.595273	0
DWR ID							

### Inspector Comment

Comment Code

FS\_ID:21612 DS\_ID:24162 EP\_NO: 8188

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the landward slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Unable to determine if crossing is in use. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation pipe and 1.25-inch electrical conduit through the levee, both 5.0 feet below the crown. Steel cutoff wall around pipe at center of levee. Siphon breaker on shoulder. Pump and pumphouse on the waterward side. Service pole, discharge box and concrete standpipe at landward toe. (Permit No. 8188-1973)

FS Date: 3/18/2009



View of crossing on waterward side.

LM Start	3.81	Rating **	М	Issue No.		85		
LM End	3.99	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	titud	e/Longitude		
Calegory				Start		End		
Item	Animal Co	ontrol		38.2598	32°	38.257252°		
пеш				-121.5952	45 °	-121.595403°		
DWR ID	DWR_RD0349_02_f _ 2015_85							
Comment Code								

A1: Exterminate rodents and backfill and compact or grout burrows.

### Inspector Comment

Exterminate the rodents from the levee section.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Steamboat Slough	Right	4.32	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.94	Rating **	U	Issue No.		40		
LM End	4.31	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		38.2580	62°	38.254715 °		
item				-121.5951	53°	-121.599900 °		
DWR ID	ID DWR_RD0349_02_f _ 2016_40							
		Comn	nent Cod	de				
V1 : Contro easements		rass and wee	ds on th	e levee slo	pes a	and		
		Inspecto	or Comm	nent				
Conrol the wild vegetation growth on the landside levee slope.								

Photo 1 of 1 : FA\_2016\_RD0349\_205\_40\_20161017\_00094.jpg



RD 349 Unnit 2 levee mile 3.94-4.31 looking downstream.

# **Unit Cover Sheet**

# Fall 2016 Levee Inspection Results

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles
Unit No. 03 Sutter Slough	Left	6.50

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	4/5/2016 - 4/5/2016		9/29/2016 - 9/29/2016	
DWR Inspector	Herman Phillips		Herman Phillips	
Accompanied By	Mr. Fred Wheeler RD 349			

### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.00	Rating **	U	Issue No.	34		
LM End	1.52	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.25475	2 °	38.275993	0
пеш				-121.60006	7°	-121.601013	0
DWR ID	DWR_RD0	DWR_RD0349_03_f _ 2016_34					

# Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Tall weeds on the landside levee slope need to be removed from the levee section.

### Photo 1 of 1: FA\_2016\_RD0349\_206\_34\_20161017\_00070.jpg



RD 349 Unit 3 landside levee slope landside.

LM Start	0.00	Rating **	U	Issue No.		35
LM End	2.74	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS La	atitud	e/Longitude	
Calegory				Start		End
Item	Vegetatio	n		38.2547	52°	38.292205 °
item			-121.6000	67°	-121.603727°	
DWR ID	DWR_RD0	349_03_f _ 201	6_35			

### Comment Code

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Tall weeds on the waterside levee slope need to be removed.

### Photo 1 of 1: FA\_2016\_RD0349\_206\_35\_20161017\_00071.jpg



RD 349 Unit 3 levee mile 0.00 waterside slope.

	LM Start	0.04	Rating **	U	Issue No.		37			
	LM End	0.04	Issue Type +	Ma	Location *		WS			
	Category	Earthen L	evee		GPS La	titud	e/Longitude			
					Start		End			
	Item	Encroachments			38.2553	27°	38.255327	0		
	item				-121.6000	33°	-121.600033	٥		
	DWR ID	DWR_RD0	349_03_f _ 201	6_37						
	Comment Code									

# TR : Tree or limb

### Inspector Comment

Dead tree on the waterside slope (large). This tree will fall and block access to the levee crown roadway.

### Photo 1 of 1: FA\_2016\_RD0349\_206\_37\_20161017\_00072.jpg



RD 349 Unit 3 levee mile 0.04 waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

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### Flood Control Project Maintenance Levee Inspections

# Levee Inspection Report By Mile - Fall 2016

# **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.30	Rating **	М	Issue No.		59	
LM End	0.30	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	croachments 3				38.259081	0
item				-121.6000	46°	-121.600046	0
DWR ID	DWR_RD0	349_03_s _ 201	4_59				
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			
Remove th	ne tree limb	o from the land	dside slo	pe.			

No Photos

LM Start	0.69	Rating **	U	Issue No.		53	
LM End	0.80	Issue Type +	En	Location *		LS	
Category	Earthen L		GPS La	atitud	e/Longitude		
Calegory				Start End			
Item	Encroach	ments		38.2646	15 °	38.266097°	
пеш				-121.6013	82°	-121.601822°	
DWR ID	DWR_RD0349_03_f _ 2016_53						
Comment Code							

# FE : Fence

### Inspector Comment

Remove the unauthorized electric fence from the landside shoulder and slope.



Unauthorized electric wire fence on the shoulder and slope landside.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.77	Rating **	М	Issue No.		976	_
LM End	0.77	Issue Type +	sue Type + En			LS	
Category	Suppleme	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.26575	1 °	38.265751	0
пеш				-121.60165	5°	-121.601655	D
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:43442 DS\_ID:24163 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to find owner and notify of pipe deterioration. Owner will need to replace or remove per CVFPB Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 8-inch steel irrigation pipe through the levee, 2.4 feet below the crown. Pump and gate valve in a pumphouse at the landward toe. Concrete standpipe on landward side.

FS Date: 3/19/2009

LM Start	0.77	Rating **	М	Issue No.	976 (cont)
LM End	0.77	Issue Type +	En	Location *	LS



View of waterward side--portion of pipe exposed on slope.

# Photo 2 of 2: UCIP\_FA\_2016\_43442\_36706.jpg



Pump house located at the landward toe.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.91	Rating **	М	Issue No.		975	
LM End	0.91	Issue Type +	ie Type + En			LS	
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.26762	0 °	38.267620	0
пеш				-121.60245	8 °	-121.602458	0
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:21673 DS\_ID:24232 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

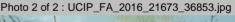
UCIP Comments: No records were found during initial desk study--need to contact owner to obtain permit number authorizing work. Unable to determine if filter system is part of crossing appurtenances. If crossing is no longer used by owner, the owner will need to coordinate with DWR Inspector and CVFPB to remove crossing according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 12-inch pipe through the levee, approximately 2.0 feet below the crown. Pipe changes diameter, 10-inch along both shoulders and 8-inch diameter exit on waterward side. Pipe exposed along both slopes. Pump on waterward side. Filtration system and power pole on landward side. Rock revetment on waterward slope. FS Date: 10/3/2013 9:42:00 AM

LM Start	0.91	Rating **	М	Issue No.	975 (cont)
LM End	0.91	Issue Type +	En	Location *	LS



View of waterward side--pipe and pump.





View of pipe crossing past pump station.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	0.97	Rating **	U	Issue No.	Issue No. 971		
LM End	0.97	Issue Type +	Ma	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory			Start End				
Item	Encroach	ments		38.2683	93 °	38.268393 °	
item				-121.6029	11 °	-121.602911 °	
DWR ID DWR_RD0349_03_s _ 2012_971							
Comment Code							

TR: Tree or limb

### Inspector Comment

Remove dead tree from the landside levee slope. Thin out the woody tree growth so that the slope can be seen.



The dead tree listed in last inspection has not been completely removed, nor has the woody tree growth been thinned out.

LM Start	1.17	Rating **	M	Issue No.		986	
LM End	1.17	Issue Type +	En	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCIP Field Study			38.2712	18°	38.271218°	
item				-121.6034	68°	-121.603468°	
DWR ID							

### Comment Code

### Inspector Comment

FS\_ID:44335 DS\_ID:24166 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe abandoned and should be done so properly or verified as having been done so properly.

FIELD\_STRUCT\_DESC: 6-inch pipe through the levee, 4.5 feet below the crown. Pump and pumphouse no longer on the landward toe. (USACE-1959). This entry matches the Drainage or Irrigation Structure

referenced in O&M manual (HLM 1.2).

FS Date: 4/9/2015

### Photo 1 of 2: UCIP\_FA\_2016\_44335\_73721.jpg



Pipe visible on LS slope.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.17	Rating **	M	Issue No.	986 (cont)		
LM End	1.17	Issue Type +	En	Location *	WS		
Catagory	Category				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	P Field Study		38.27121	8°	38.271218°	
пеш				-121.60346	8 °	-121.603468°	
DWR ID							
Comment Code							

### Inspector Comment

FS\_ID:44335 DS\_ID:24166 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe abandoned and should be done so properly or

verified as having been done so properly.

FIELD\_STRUCT\_DESC: 6-inch pipe through the levee, 4.5 feet below the crown. Pump and pumphouse no longer on the landward toe. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.2).

FS Date: 4/9/2015



Pipe visible on LS slope.

LM Start	1.26	Rating **	M	Issue No.		984	
LM End	1.26	Issue Type +	En	Location *	WS		
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
Item	DWR UCI	P Field Study		38.2725	15°	38.272515°	
item				-121.6030	48 °	-121.603048 °	
DWR ID						·	

# Comment Code

### Inspector Comment

FS\_ID:47043 DS\_ID:24169 EP\_NO: 11744

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 1 of 2: 8-inch pipe through the levee, 3.7 feet below the crown. 8-inch pipe is reduced to 3-inch pipe on waterward side. Steel cutoff wall around pipe at center of levee. Siphon breaker at landward shoulder. Siphon breaker at landward shoulder. Slant pump on waterward side. Discharge structure at landward toe. Rock revetment on waterward slope. (Permit No. 11744-1976)

FS Date: 3/19/2009

# Photo 1 of 1: UCIP\_FA\_2016\_47043\_36864.jpg



View of pipe, control panel, and stairs. 2 pipes go through levee 14-inch and 8-inch.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.26	Rating **	М	Issue No.		983	
LM End	1.26	Issue Type +	En	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP Field Study			38.27253	2 °	38.272532	0
пеш				-121.60303	9°	-121.603039	0
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:47042 DS\_ID:24168 EP\_NO: 11744

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 2 of 2: 14-inch steel irrigation pipe and 2-inch electric conduit through the levee, both 4.4 feet below the crown. Reduced to 12-inch steel pipe under both levee slopes. Steel cutoff wall around pipe at center of levee. Siphon breaker at landward shoulder. Slant pump on waterward side with staircase access. Discharge structure at landward toe. Rock revetment on waterward slope. (Permit No. 11744-1976)

LM Start	1.26	Rating **	М	Issue No.	983 (cont)
LM End	1.26	Issue Type +	En	Location *	WS



Pump system located on waterward side.





Pipe reduced from 14-inch to 10-inch and conduit through levee.

\* Location

LS : Land Side N/A : Not Applicable

WS : Water Side

CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.47	Rating **	U	Issue No.	64		
LM End	1.47	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Encroachments			38.2753	32°	38.275332°		
item				-121.601359°		-121.601359°	
DWR ID	DWR_RD0	349_03_s _ 201	4_64				
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			
O						U C-II	

Cut up tree on waterward berm. This tree reported during the fall inspection has not been removed from the water side berm.



Cut up fallen tree on waterside slope.

LM Start	1.49	Rating **	М	Issue No.		978	
LM End	1.49	Issue Type +	En	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory			Start		End		
DWR UCIP Field Study				38.2755	32°	38.275532°	
Item				-121.601225 °		-121.601225°	
DWR ID							

# Comment Code

### Inspector Comment

FS\_ID:43446 DS\_ID:24229 EP\_NO: 2954

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes.

Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: [R.D. No. 349 Drainage Pumping Plant] 1 of 3: 18-inch pipe through the levee, 7.8 feet below the crown. Siphon breakers on waterward slope. Pumps on platform on landward side.

FS Date: 3/19/2009

### Photo 1 of 2: UCIP\_FA\_2016\_43446\_36725.jpg



Aerial map showing alignment of 18-inch pipe.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.49	Rating **	М	Issue No.		978 (cont)	
LM End	1.49	Issue Type +	En	Location *		WS	
Category Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCIP Field Study			38.27553	2 °	38.275532	0
пеш				-121.60122	5°	-121.601225	0
DWR ID							

# Inspector Comment

Comment Code

FS\_ID:43446 DS\_ID:24229 EP\_NO: 2954

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: [R.D. No. 349 Drainage Pumping Plant] 1 of 3: 18-inch pipe through the levee, 7.8 feet below the crown. Siphon breakers on waterward slope. Pumps on platform on landward side. FS Date: 3/19/2009



View of all 3 pipes through levee and visible on waterward toe.

LM Start	1.49	Rating **	М	Issue No.		977
LM End	1.49	Issue Type +	En	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.2755	46°	38.275546°
пеш				-121.6012	18°	-121.601218°
DWR ID						

### Inspector Comment

Comment Code

FS\_ID:43445 DS\_ID:24228 EP\_NO: 2954

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: [R.D. No. 349 Drainage Pumping Plant] 2 of 3: 24-inch pipe through the levee, 7.8 feet below the crown. Siphon breakers on waterward slope. Pumps on platform on landward side. FS Date: 3/19/2009

### Photo 1 of 2: UCIP\_FA\_2016\_43445\_36730.jpg



Enter photo 5 description or comment here.

# Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.49	Rating **	М	Issue No.	977 (cont)			
LM End	1.49	Issue Type +	En	Location *	WS			
Category Supplemental GPS Latitude/Long					le/Longitude			
Calegory	alegory					End		
Item	DWR UC	P Field Study		38.2755	46 °	38.275546°		
item				-121.6012 <sup>-</sup>	18°	-121.601218°		
DWR ID	DWR ID							
	Comment Code							

### Inspector Comment

FS\_ID:43445 DS\_ID:24228 EP\_NO: 2954

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: [R.D. No. 349 Drainage Pumping Plant] 2 of 3: 24-inch pipe through the levee, 7.8 feet below the crown. Siphon breakers on waterward slope. Pumps on platform on landward side. FS Date: 3/19/2009

Photo 2 of 2: UCIP\_FA\_2016\_43445\_36727.jpg



View of pipe on waterward side--pipe running. Siphon breaker visible on pipe.

LM Start	1.49	Rating **	М	Issue No.		972
LM End	1.49	Issue Type +	En	Location *		WS
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study		38.2755	70°	38.275570°
пеш				-121.6012	22 °	-121.601222°
DWR ID						•

# Comment Code

### Inspector Comment

FS\_ID:21632 DS ID:24171 EP\_NO: 2954

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: [R.D. No. 349 Drainage Pumping Plant] 3 of 3: 24-inch pipe through the levee, 7.8 feet below the crown. Metal cutoff wall around pipe at landward shoulder. Siphon breakers on waterward slope. Two anchor posts driven into levee on each side of pipe. Pumps on platform on landward side. (Permit No. 2954-1959)

FS Date: 3/19/2009

### Photo 1 of 2: UCIP FA 2016 21632 36733.jpg



Aerial view of all 3 pipes through levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.49	Rating **	М	Issue No.		972 (cont)		
LM End	1.49	Issue Type +	En	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory		Start		End				
Item	DWR UCI	P Field Study		38.27557	° 0	38.275570	0	
пеш				-121.60122	2°	-121.601222	0	
DWR ID								

# Inspector Comment

Comment Code

FS\_ID:21632 DS\_ID:24171 EP\_NO: 2954

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: [R.D. No. 349 Drainage Pumping Plant] 3 of 3: 24-inch pipe through the levee, 7.8 feet below the crown. Metal cutoff wall around pipe at landward shoulder. Siphon breakers on waterward slope. Two anchor posts driven into levee on each side of pipe. Pumps on platform on landward side. (Permit No. 2954-1959)

FS Date: 3/19/2009



View of waterward side--2-24 inch pipes.

LM Start	1.77	Rating **	U	Issue No.		39
LM End	6.31	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee	ree GPS Latitude/Long			
Calegory				Start		End
Item	Vegetatio	n		38.2795	35 °	38.329043°
пеш				-121.6003	12 °	-121.579382°
DWR ID	DWR RD0	349 03 f 201	6 39			

### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

### Inspector Comment

There hasn't been any maintenance done to the levee slope landside and the waterside from here to the end levee mile 6.31.

### Photo 1 of 1: FA\_2016\_RD0349\_206\_39\_20161017\_00073.jpg



RD 349 Unit 3 levee mile 1.77 through to levee mile 6.31.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.82	Rating **	M	Issue No.		985	
LM End	1.82	Issue Type +	En	Location *	LS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P Field Study		38.2801	99°	38.280199°	
пеш				-121.6005	00°	-121.600500°	
DWR ID							

# Comment Code

# Inspector Comment

FS\_ID:47045 DS\_ID:24172 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 1 of 2: 12-inch pipe and 2-inch electrical conduit through the levee, both 8.0 feet below the crown. Siphon breaker in pipe riser on landward slope. Concrete standpipe at landward toe. Pump on waterward side with stairway access.

FS Date: 3/19/2009

LM Start	1.82	Rating **	М	Issue No.	985 (cont)
LM End	1.82	Issue Type +	En	Location *	LS

# Photo 1 of 2: UCIP\_FA\_2016\_47045\_36736.jpg



View of waterward side--pump, pipe, control panel, and stairway.

### Photo 2 of 2: UCIP\_FA\_2016\_47045\_36735.jpg



Stand pipe located on landward shoulder--pipe locked.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	1.92	Rating **	М	Issue No.		2	
LM End	1.97	Issue Type +	Ma	Location *		WS	
Category	Suppleme	ental		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	2015 USACE Erosion Survey,			38.3109	59°	° 38.311288°	
пеш	DRAFT			-121.597748°		8° -121.596972°	
DWR ID	DWR_RD0	349_03_s _ 201	6_2				
		Comn	nent Cod	de			
	Inspector Comment						
	2015: Tall vertical sections into the levee slope and erosion along the toe. [2015 Site ID: STR_26-1_R]						

No Photos

LM Start	2.00	Rating **	М	Issue No.		974
LM End	2.00	Issue Type +	En	Location *		WS
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		38.2824	98°	38.282498 °
item				-121.6017	58°	-121.601758°
DWR ID						

# Comment Code

### Inspector Comment

FS\_ID:21634 DS\_ID:24173 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 8-inch pipe through the levee, 6.7 feet below the crown. Pump in pumphouse and concrete standpipe at the landward toe. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.1).

FS Date: 3/19/2009

### Photo 1 of 2: UCIP\_FA\_2016\_21634\_36739.jpg



View of landward side--pump house and stand pipe.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.00	Rating **	М	Issue No.		974 (cont)	
LM End	2.00	Issue Type +	En	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Calegory				Start End			
Item	DWR UCI	P Field Study		38.28249	98°	38.282498 °	
пеш				-121.60175	8°	-121.601758°	
DWR ID							
Comment Code							

# Inspector Comment

FS\_ID:21634 DS\_ID:24173 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 8-inch pipe through the levee, 6.7 feet below the crown. Pump in pumphouse and concrete standpipe at the landward toe. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.1).

FS Date: 3/19/2009

# Photo 2 of 2: UCIP\_FA\_2016\_21634\_36738.jpg



View of waterward side--dense vegetation limits inspection.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.56	Rating **	М	Issue No.		979		
LM End	2.56	Issue Type +	En	Location *		WS		
Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		38.28963	3 °	38.289633	0	
пеш				-121.60331	3°	-121.603313	0	
DWR ID								

# Inspector Comment

Comment Code

FS\_ID:43423 DS\_ID:24176 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner--If crossing is no longer used by owner, the owner will need to coordinate with DWR Inspector and CVFPB to remove crossing according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch pipe through the levee, 8.2 feet below the crown. Pipe has plate welded on the waterward end. 3-inch galvanized pipe runs parallel to 10-inch pipe. Abandoned tank on waterward slope. Distribution box and concrete standpipe at landward toe. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.7). FS Date: 3/19/2009

LM Start	2.56	Rating **	М	Issue No.	979 (cont)
LM End	2.56	Issue Type +	En	Location *	WS



View of waterward side--dense vegetation covers slope.





Pipe visible on waterward side.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence C: Enforcement

\* Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.74	Rating **	М	Issue No.		40	
LM End	3.00	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS La	atitud	le/Longitude	
Calegory	egory			Start		End	
Item	Vegetation			38.2922	05°	38.295762°	
пеш				-121.6037	27°	-121.604755 °	
DWR ID	DWR_RD0	349_03_f _ 201	6_40				
		Comn	nent Cod	de			
V1 : Control annual grass and weeds on the levee slopes and easements.							
			🛆				

Inspector Comment

There is a veg site here that has not been maintained, the site is not managed and not maintained.

No Photos

LM Start	2.77	Rating **	М	Issue No.		980	
LM End	2.77	Issue Type +	En	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.292557°		38.292557	0
пеш				-121.6037	67°	-121.603767	0
DWR ID							
Comment Code							

### Inspector Comment

FS\_ID:43424 DS\_ID:24177 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 2007 Erosion Repair Site location?--Need to contact owner to determine if crossing is still in use. If crossing is no longer used by owner, the owner will need to coordinate with DWR Inspector and CVFPB to remove crossing according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch pipe through the levee, 8.7 feet below the crown. Headwall and gate valve on the landward side. FS Date: 3/19/2009

# Photo 1 of 2 : UCIP\_FA\_2016\_43424\_36869.jpg



Waterward side--appears to be an erosion repair site. New pipe on waterward side and damaged pipe on landward side.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.77	Rating **	М	Issue No.		980 (cont)	
LM End	2.77	Issue Type +	En	Location *		WS	
Supplemental				GPS Latitude/Longitude			
Calegory				Start End			
Item	DWR UCI	P Field Study		38.2925	57°	38.292557°	
пеш				-121.6037	67°	-121.603767°	
DWR ID							
	Comment Code						

# Inspector Comment

FS\_ID:43424 DS\_ID:24177 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 2007 Erosion Repair Site location?--Need to contact owner to determine if crossing is still in use. If crossing is no longer used by owner, the owner will need to coordinate with DWR Inspector and CVFPB to remove crossing according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch pipe through the levee, 8.7 feet below the crown. Headwall and gate valve on the landward side. FS Date: 3/19/2009



View of waterward side--headwall, pipe, and gate valve.

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Thursday, December 08, 2016 11:21

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	2.88	Rating **	U	Issue No.		997
LM End	2.88	Issue Type +	En	Location *		WS
Catagony	Category Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP Field Study			38.29408	80 °	38.294080°
пеш				-121.60426	60°	-121.604260°
DWR ID						·

# Inspector Comment

Comment Code

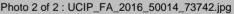
FS\_ID:50014 DS\_ID:24178 EP\_NO: 6321 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/17/2016 Unable to determine condition of crossing due to dense vegetation on both WS and LS. Need to contact owner to determine status of crossing. Unable to confirm if WS pipe capped with metal plate. (DWR UCIP - omagana)4/08/2015 Appears abandoned and if so should be done so properly. Pipe open at LS toe. Unable to verify if plate is welded over WS end. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: \*ABANDONED\* 8-inch steel irrigation pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall around pipe at center of levee. Siphon breaker is located on the waterside (WS) shoulder. Pump is located on the landside (LS). Gate valve is located on the WS. 1.5-inch filler pipe at same location. Plate welded to WS end (Permit No. 6321, 1969 - B.C. Wheeler). FS Date: 8/17/2016

LM Start	2.88	Rating **	U	Issue No.	997 (cont)
LM End	2.88	Issue Type +	En	Location *	WS



Pipe and pump platform on LS toe.





1.5-inch filler pipe and 8-inch steel irrigation pipe at LS toe.

# Levee Inspection Report By Mile - Fall 2016

# Reclamation District No. 0349 Sutter Island

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.02	Rating **	U	Issue No.		41	
LM End	6.31	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	Category					End	
Item	Vegetation			38.29606	5°	38.329043	0
пеш		-121.60471	8°	-121.579382	0		
DWR ID	DWR ID DWR_RD0349_03_f _ 2016_41						
	Commont Code						

### Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

### Inspector Comment

From levee mile 3.02 to levee mile 6.31 water side slope is overgrown with tall weeds and other wild vegetation.

### Photo 1 of 1: FA\_2016\_RD0349\_206\_41\_20161017\_00074.jpg



RD 349 Unit 3 levee mile 3.02 looking downstream waterside.

LM Start	3.19	Rating **	U	Issue No.		73
LM End	3.19	Issue Type +	Ма	Location *		LS
Category Earthen Levee GF					titud	le/Longitude
Calegory				Start		End
Item	Trim / Thin Trees			38.2982	23 °	38.298223°
пеш			-121.6032	40°	-121.603240 °	
DWR ID	DWR_RD0349_03_f _ 2014_73					

### Comment Code

T4: Trim trees over roadway to at least 12 feet above ground level.

### Inspector Comment

This tree on the landside slope is rotten and could possibly fall across levee section.

LM Start	3.19	Rating **	U	Issue No.	73 (cont)
LM End	3.19	Issue Type +	Ma	Location *	LS

# Photo 1 of 2: FA\_2016\_RD0349\_206\_73\_20160913\_00004.jpg



Close up view of dead tree standing above crown roadway.

### Photo 2 of 2: FA\_2016\_RD0349\_206\_73\_20160913\_00005.jpg



Dead tree above crown roadway landward.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.34	Rating **	М	Issue No.		993	
LM End	3.34	Issue Type +	En	Location *		LS	
Category	ental	GPS Latitude/Longitude					
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		38.29970	3 °	38.299703°	
пеш				-121.60111	2 °	-121.601112°	
DWR ID							

## Inspector Comment

Comment Code

FS\_ID:44389 DS\_ID:24179 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing altered--need to contact owner to obtain permit number authorizing work. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: \*DELETE\*

FS Date: 4/9/2015

LM Start	3.34	Rating **	М	Issue No.	993 (cont)
LM End	3.34	Issue Type +	En	Location *	LS



View of waterward side--pump, control panel, pipe, and walkway.

Photo 2 of 2: UCIP\_FA\_2016\_44389\_36875.jpg



Corrugated metal riser located on waterward toe.

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.34	Rating **	М	Issue No.		994	
LM End	3.34	Issue Type +	En	Location *		LS	
Category	GPS Latitude/Longitude						
Calegory	Calegory				Start		
Item	DWR UCIP Field Study				B°	38.299718	0
пеш				-121.60109	5°	-121.601095	0
DWR ID							

### Inspector Comment

Comment Code

FS\_ID:44390 DS\_ID:24214 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Walway and pier abandoned and appears to be a

hazard that should be removed.

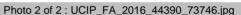
FIELD\_STRUCT\_DESC: 10-inch steel irrigation pipe through the levee 5.8-feet below the crown. Pump, butterfly valve, and electrical panel on WS slope. Pier and walkway next to pump on WS slope. Power pole, filters, and distribution box at LS toe.

FS Date: 4/9/2015

LM Start	3.34	Rating **	М	Issue No.	994 (cont)
LM End	3.34	Issue Type +	En	Location *	LS



Pipe, filter system, powerpole, and distribution box at LS toe.





Pump, electrical panel, butterfly valve, and walkway on WS slope.

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.77	Rating **	М	Issue No.		973
LM End	3.77	Issue Type +	En	Location *	LS	
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory	legory			Start		End
Item	DWR UCI	P Field Study		38.30530	00°	38.305300°
пеш				-121.59862	20°	-121.598620°
DWR ID						·

# Comment Code

### Inspector Comment

FS\_ID:21644 DS\_ID:24180 EP\_NO: 9290

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: 10-inch steel pipe and 1.5-inch steel electrical conduit through the levee, both 4.0 feet below the crown. Steel cutoff wall around pipe and conduit at center of levee. Pump and gate valve on waterward slope. 6-inch intake pipe extends from pump into channel. Distribution system at landward toe. (Permit No. 9290-1975)

FS Date: 3/19/2009

LM Start	3.77	Rating **	М	Issue No.	973 (cont)
LM End	3.77	Issue Type +	En	Location *	LS



View of waterward side.

### Photo 2 of 2: UCIP\_FA\_2016\_21644\_36778.jpg



90 elbow at daylight and continues along slope and connects to pump.

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.96	Rating **	M	Issue No.		987	
LM End	3.96	Issue Type +	En	Location *	LS		
Category	GPS Latitude/Longitude						
Calegory	Category					End	
Item	DWR UC	IP Field Study		38.3075	07°	38.307507	0
пеш		-121.5968	75 °	-121.596875	0		
DWR ID							
Comment Code							

No Photos

### Inspector Comment

FS\_ID:43454 DS\_ID:24182 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 7-inch pipe through the levee,

2.0 feet below the crown. FS Date: 3/19/2009

LM Start	3.96	Rating **	М	Issue No.	989		
LM End	3.96	Issue Type +	En	Location *	LS		
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	DWR UCI	P Field Study	38.3075	19°	38.307519°		
item			-121.5968	76°	-121.596876°		
DWR ID							
Comment Code							

No Photos

### Inspector Comment

FS\_ID:43456 DS\_ID:24181 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances.

FIELD\_STRUCT\_DESC: \*REMOVED\* 10-inch pipe through the levee, 3.5 feet below the crown. Pump and gate valve in pumphouse at the landward toe. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 4.2). Removed and replaced with 10-inch pipe under Permit No. 15503 (1990).

FS Date: 3/19/2009

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.96	Rating **	М	Issue No.	988		
LM End	3.96	Issue Type +	En	Location *	LS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.30753	3°	38.307533 °	
пеш				-121.59688	1 °	-121.596881 °	
DWR ID							

## Comment Code

### Inspector Comment

FS\_ID:43455 DS\_ID:24201 EP\_NO: 15503

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 10-inch steel irrigation pipe through the levee, 3.0 feet below the crown. Steel cutoff wall around pipe 24-inches landward of levee center. Pump and gate valve in pumphouse at the landward toe. Pipe is exposed along waterward slope. (Permit No. 15503-1990)

FS Date: 3/19/2009

LM Start	3.96	Rating **	М	Issue No.	988 (cont)
LM End	3.96	Issue Type +	En	Location *	LS

### Photo 1 of 2: UCIP\_FA\_2016\_43455\_36783.jpg



Pump house located on landward side.

### Photo 2 of 2: UCIP\_FA\_2016\_43455\_36782.jpg



View of waterward side.

## Levee Inspection Report By Mile - Fall 2016

## **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	3.99	Rating **	U	Issue No.		25		
LM End	3.99	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Encroach	38.3079	97°	38.307997°				
пеш				-121.597039°		9° -121.597039°		
DWR ID	DWR_RD0	349_03_s _ 201	2_25					
		Comn	nent Cod	de				
FE : Fence	)							
Inspector Comment								
Unauthorized cable gate crossing levee. Cable gates crossing the								

Unauthorized cable gate crossing levee. Cable gates crossing the levee crown have been prohibited. There is no CVFPB permit for this crossing. This encroachment should be removed.



Cable crossings has been banned. They are unauthorized. No new photo.

LM Start	4.20	Rating **	М	Issue No.		78	
LM End	4.20	Issue Type +	Ma	Location *	LS		
Category	evee	GPS La	atitud	le/Longitude			
Category				End			
Item	Trim / Thi	n Trees		38.3105	28°	38.310528°	
пеш				-121.5971	80°	-121.597180°	
DWR ID	DWR_RD0	349_03_f _ 201	4_78			·	
Comment Code							
T4 : Trim t	T4 : Trim trees over roadway to at least 12 feet above ground level.						

Inspector Comment

Dead tree need removing from levee section.

No Photos

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	4.26	Rating **	M	Issue No.	991			
LM End	4.26	Issue Type +	En	Location *	LS			
Category	GPS La	atitud	e/Longitude					
Calegory	Calegory					End		
Item	DWR UC	IP Field Study		38.3108	96 °	38.310896	0	
пеш				-121.5962	42 °	-121.596242	0	
DWR ID								
	Comment Code							

## Inspector Comment

FS\_ID:43458 DS\_ID:24183 EP\_NO: 8681

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to contact owner to determine status of crossing. If crossing is no longer in use owner will need to coordinate with DWR inspector and CVFPB to remove according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

FIELD\_STRUCT\_DESC: 1 of 2: 6-inch steel pipe and 1.5-inch steel electrical conduit through the levee, 4.1 feet and 2.0 feet below the crown, respectively. Steel cutoff wall around pipe and conduit at center of levee. Pump on platform and gate valve on the waterward slope, not connected. Exposed suction pipe from pump to channel. Rock revetment on waterward slope. (Permit No. 8681-1973) FS Date: 3/19/2009

Photo 1 of 1: UCIP\_FA\_2016\_43458\_36784.jpg



View of waterward side. 2 crossing visible 12-inch and 6-inch pipes.

## Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	4.26	Rating **	M	Issue No.		990		
LM End	4.26	Issue Type +	En	Location *		LS		
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	P Field Study		38.31090	)5 °	38.310905°		
пеш				-121.59622	26 °	-121.596226°		
DWR ID								

## Inspector Comment

Comment Code

FS\_ID:43457 DS\_ID:24184 EP\_NO: 8681

Repair Type: Non-Urgent Crossing Status: Found

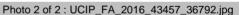
UCIP Comments: Need to contact owner. Is filter sytem located on landward side part of crossing. If so need permit number authorizing work. Also if crossing is no longer used by owner, the owner will need to coordinate with DWR Inspector and CVFPB to remove crossing according to Title 23 requirements. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 2 of 2: 12-inch steel irrigation pipe through the levee, 4.3 feet feet below the crown. Steel cutoff wall around pipe at center of levee. Pump on platform and gate valve on the waterward slope. Exposed suction pipe from pump to channel. Rock revetment on waterward slope. (Permit No. 8681-1973) FS Date: 3/19/2009

 LM Start
 4.26
 Rating \*\*
 M
 Issue No.
 990 (cont)

 LM End
 4.26
 Issue Type +
 En
 Location \*
 LS



View of waterward side. 2 crossing visible 12-inch and 6-inch pipes.





Pump associated with 12-inch pipe.

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Not Applicable M: Not Inspected/Rated M: Minimally Acceptable D: C: Corrected Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	4.55	Rating **	М	Issue No.	992		
LM End	4.55	Issue Type +	En	Location *	LS		
Category	ental	GPS La	titud	e/Longitude			
Calegory						End	
Item	DWR UCI	P Field Study		38.3136	59°	38.313659°	
пеш			-121.5921	59°	-121.592159°		
DWR ID							
	Comment Code						

## Inspector Comment

FS\_ID:43459 DS\_ID:24185 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: No connection present--need to contact owner to determine if owner plans to use. If crossing is no longer in use owner will need to coordinate with DWR inspector and CVFPB to remove according to Title 23 requirements. Recommend removing vegetation along pipe alignment. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect.

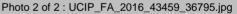
FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation pipe and 2-inch electrical conduit through the levee, both 2.8 feet below the crown. Abandoned pumps and gate valve on the waterward slope. Service pole on the landward slope. Concrete headwall on landward sdie. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 4.8).

FS Date: 3/19/2009

LM Start	4.55	Rating **	М	Issue No.	992 (cont)	
LM End	4.55	Issue Type +	En	Location *	LS	



Waterward side--pipe visible through dense vegetation.





Pump located on waterward side is not connected.

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	4.74	Rating **	U	Issue No.		80		
LM End	6.30	Issue Type +	Ма	Location *		CR		
Category Earthen Levee			GPS Latitude/Longitude					
Calegory				Start		End		
Item	Vegetatio	n		38.316183 °		38.329088 °		
пеш				-121.5907	35 °	-121.579400°		
DWR ID	DWR ID DWR_RD0349_03_f _ 2015_80							
Comment Code								
V9 : Keep the crown roadway free of vegetation.								

### Inspector Comment

The crown roadway should be keep free of vegetation. No new picture, the conditions has not changed since last inspection.



RD 349 Levee mile 4.74 looking at overgrown crown roadway. Weeds are taller than four feet. Extreme fire hazard.

LM Start	4.80	Rating **	М	Issue No.		981
LM End	4.80	Issue Type +	En	Location *	CR	
Category	ental	GPS La	atitud	e/Longitude		
Category			Start		End	
Item	DWR UCI	P Field Study		38.3169	68°	38.316968°
item				-121.5902	19°	-121.590219°
DWR ID						·

## Comment Code

### Inspector Comment

FS\_ID:43431 DS\_ID:24186 EP\_NO: 15359

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD STRUCT DESC: 10-inch steel irrigation pipe through the levee. 6.0 feet below the crown. Siphon breaker in protective house at levee shoulder. Pump in pumphouse and power pole at landward toe. Pipe connected to 8-inch exposed pipe at landward shoulder, extending to pumphouse. Filter screen in channel at waterward toe. (Permit No. 15359-1990)

FS Date: 3/19/2009



Air vent located on pipe on landward.

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	4.80	Rating **	М	Issue No.	981 (cont)		
LM End	4.80	Issue Type +	En	Location *	CR		
Category				GPS La	titud	e/Longitude	
Calegory			Start		End		
ltom	DWR UCI	P Field Study		38.3169	68°	38.316968 °	
пеш	Item			-121.5902	19°	-121.590219°	
DWR ID						·	
	Comment Code						

### Inspector Comment

FS\_ID:43431 DS\_ID:24186 EP\_NO: 15359

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 3/19/2009

UCIP Comments: Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 10-inch steel irrigation pipe through the levee, 6.0 feet below the crown. Siphon breaker in protective house at levee shoulder. Pump in pumphouse and power pole at landward toe. Pipe connected to 8-inch exposed pipe at landward shoulder, extending to pumphouse. Filter screen in channel at waterward toe. (Permit No. 15359-1990)

Photo 2 of 2: UCIP\_FA\_2016\_43431\_36801.jpg



Pipe located on waterward side.

LM Start	5.04	Rating **	М	Issue No.	42			
LM End	5.04	Issue Type +	Ma	Location *	LS			
Category	Earthen L	rthen Levee			GPS Latitude/Longitude			
Calegory				Start		End		
Item	Vegetation			38.3203	21 °	38.320321 °		
item				-121.5896	17°	-121.589617°		
DWR ID DWR_RD0349_03_f _ 2016_42								
Comment Code								

V4: Elderberries are blocking visibility and flood fight capability.

### Inspector Comment

This elderberry bush here can be trimmed so the ground can be seen.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Levee Inspection Report By Mile - Fall 2016

## **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	5.06	Rating **	М	Issue No.		3		
LM End	5.18	Issue Type +	Ma	Location *		WS		
Category	Suppleme	ental		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	2015 USACE Erosion Survey,			38.3204	91 °	38.322233 °		
item	DRAFT			-121.589927°		-121.590127°		
DWR ID	DWR_RD0	349_03_s _ 201	6_3					
		Comn	nent Cod	de				
	Inspector Comment							
2015: Large Tree popout and tall vertical sections into the levee slope. [2015 Site ID: STR_26-9_L]								

No Photos

Rating \*\* Issue No. LM Start 5.14 Μ 44 Issue Type + En Location \* CR LM End 5.14 Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.321778° 38.321778° -121.589740 ° -121.589740 ° DWR ID DWR\_RD0349\_03\_s \_ 2016\_44 Comment Code TR: Tree or limb

No Photos

Inspector Comment

Remove the tree limbs from the crown roadway.

CR : Crown

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	5.19	Rating **	М	Issue No.		982
LM End	5.19	Issue Type +	En	Location *		CR
Supplemental			GPS Latitude/Longitude			
Category				Start		End
Item	DWR UC	P Field Study		38.3224	48°	38.322448 °
пеш	m			-121.5896	75°	-121.589675 °
DWR ID						·
	Comment Code					

### Inspector Comment

FS\_ID:43433 DS\_ID:24188 EP\_NO: N/A

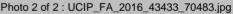
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Walkway is no longer functional. Need to contact owner--if crossing is no longer used owner will need to coordinate with DWR Inspector and CVFPB. Dense vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) through the levee slopes. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. FIELD\_STRUCT\_DESC: 12-inch pipe through the levee, 6.2 feet below the crown. Pump and control panel on piling structure in stream, with walkway. Service pole and concrete standpipe on the landward slope. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.5). FS Date: 3/19/2009

LM Start	5.19	Rating **	М	Issue No.	982 (cont)
LM End	5.19	Issue Type +	En	Location *	CR



View of landwar side--pipe and stand pipe visible.





View of waterward side--pipe and remaining appurtenances.

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	5.19	Rating **	М	Issue No.		995	
LM End	5.19	Issue Type +	En	Location *		CR	
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.32246	60°	38.322460°	
пеш				-121.58969	90°	-121.589690°	
DWR ID							
	Comment Code						

## Inspector Comment

FS\_ID:44391 DS\_ID:24189 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Appears abandoned and if so should be done so

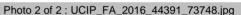
properly.

FIELD\_STRUCT\_DESC: 4-inch pipe through the levee, 3.3 feet below the crown. Gate and pump on platform at the landward toe (missing). Platform on the waterward side. (USACE-1959). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.6). FS Date: 4/9/2015

LM Start	5.19	Rating **	М	Issue No.	995 (cont)
LM End	5.19	Issue Type +	En	Location *	CR



4-inch pipe next to larger pipe on LS slope.





4-inch pipe next to larger pipe on LS slope.

## Levee Inspection Report By Mile - Fall 2016

## **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	5.22	Rating **	М	Issue No.		21		
LM End	5.22	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		38.3226	93°	38.322693°		
item	item				27°	-121.589327°		
DWR ID	DWR_RD0	349_03_s _ 201	2_21			·		
		Comn	nent Cod	de				
T4: Trim t	rees over i	oadway to at	least 12	feet above	grou	und level.		
		Inspecto	or Comm	nent				
Remove tr	Remove tree limbs over hanging roadway.							

No Photos

Rating \*\* Issue No. LM Start 5.25 Μ 36 5.25 Issue Type + Ма Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 38.322868° 38.322868 ° -121.588868 ° -121.588868 ° DWR ID DWR\_RD0349\_03\_f \_ 2012\_36 Comment Code

T4: Trim trees over roadway to at least 12 feet above ground level.

Inspector Comment

Remove tree limb hanging over roadway.

No Photos

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	5.57	Rating **	M	Issue No.	996		
LM End	5.57	Issue Type +	En	Location *	LS		
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.3258	45 °	38.325845	0
пеш				-121.5848	90°	-121.584890	0
DWR ID							
Comment Code							

## Inspector Comment

FS\_ID:44392 DS\_ID:24191 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Electromagnetic survey indicated a crossing at this point. Appears abandoned and if so should be done so properly. FIELD\_STRUCT\_DESC: \*ABANDONED\* 3-inch pipe through the levee,

3.0 feet below the crown. FS Date: 3/19/2009

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2016

### Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	5.58	Rating **	М	Issue No.	998		_
LM End	5.58	Issue Type +	En	Location *	LS		
Category				GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.32609	6°	38.326096	0
пеш				-121.58474	7°	-121.584747	0
DWR ID							
	Comment Code						

## Inspector Comment

FS\_ID:50016 DS\_ID:24190 EP\_NO: 16077

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Crossing has been downgraded from Urgent to Non-Urgent no signs of pipe failure were present on levee crown or slopes during site visit. Need to contact owner to determine last internal inspection completed. (DWR UCIP - omagana)3/19/2009 Soil disturbed on landward slope--need to contact owner. Also vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 10-inch pipe through the levee, 3.8 feet below the crown. Pump in pumphouse on waterside (WS). Service pole on WS slope. Concrete standpipe and distribution box located on the WS toe. Pipe is exposed on both slopes. Section of pipe under crown, between shoulders, removed and replaced with 10-inch steel pipe in November 20, 1991, no permit application was filed. In August 13, 1993, Mr. Steve Makis of Flood Management, revealed that the pipe was not soil proofed, and siphon breaker was not installed, and backfill was less than 90 % and less than 2-foot of cover through the levee crown. Pipe was required to be completely removed and replaced in September 15, 1993. (10-inch authorized under Permit No. 16077, 1993 - John McCormack Company, 10-inch pipe replaces the USACE O&M 10-inch pipe referenced as HLM 5.9) [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual Unit No. 110, May 1959, HLM 5.9, Drawing not available]. FS Date: 8/17/2016



View of LS--pipe and stand pipe visible.

## Levee Inspection Report By Mile - Fall 2016

## Reclamation District No. 0349 Sutter Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough	Left	6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	5.58	Rating **	М	Issue No. 998 (co		998 (cont)	
LM End	5.58	Issue Type +	En	Location *	LS		
Category				GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.32609	6°	38.326096	0
пеш				-121.58474	7°	-121.584747	0
DWR ID							
	Comment Code						

## Inspector Comment

FS\_ID:50016 DS\_ID:24190 EP\_NO: 16077

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/22/2016 Crossing has been downgraded from Urgent to Non-Urgent no signs of pipe failure were present on levee crown or slopes during site visit. Need to contact owner to determine last internal inspection completed. (DWR UCIP - omagana)3/19/2009 Soil disturbed on landward slope--need to contact owner. Also vegetation limits the inspector's visibility to identify signs of pipe failure (leaks) along the slope. Recommend removing vegetation along pipe alignment to conduct proper inspection of structure and appurtenances. Note date on photos should be 3/18/09 not 7/26/08 camera metadata is incorrect. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 10-inch pipe through the levee, 3.8 feet below the crown. Pump in pumphouse on waterside (WS). Service pole on WS slope. Concrete standpipe and distribution box located on the WS toe. Pipe is exposed on both slopes. Section of pipe under crown, between shoulders, removed and replaced with 10-inch steel pipe in November 20, 1991, no permit application was filed. In August 13, 1993, Mr. Steve Makis of Flood Management, revealed that the pipe was not soil proofed, and siphon breaker was not installed, and backfill was less than 90 % and less than 2-foot of cover through the levee crown. Pipe was required to be completely removed and replaced in September 15, 1993. (10-inch authorized under Permit No. 16077, 1993 - John McCormack Company, 10-inch pipe replaces the USACE O&M 10-inch pipe referenced as HLM 5.9) [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual Unit No. 110, May 1959, HLM 5.9, Drawing not available]. FS Date: 8/17/2016

Photo 2 of 2: UCIP\_FA\_2016\_50016\_36843.jpg



View of pipe and pump along WS slope.

## Levee Inspection Report By Mile - Fall 2016

## **Reclamation District No. 0349 Sutter Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Sutter Slough		6.50	09/29/2016 09/29/2016	Herman Phillips

LM Start	5.83	Rating **	М	Issue No.	88		
LM End	5.83	Issue Type +	Ma	Location *	CR		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	ОГУ			Start		End	
	Item Trim / Thin Trees			38.329465 °		38.329465 °	
пеш				-121.584995 °		-121.584995 °	
DWR ID DWR_RD0349_03_f _ 2014_88							
Comment Code							
T4: Trim trees over roadway to at least 12 feet above ground level.							
Inspector Comment							
Trim the tree limb hanging over crown roadway.							

No Photos

Rating \*\* Issue No. LM Start 5.89 90 5.89 Issue Type + Location \* CR LM End Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 38.330308° 38.330308° -121.584560° -121.584560° DWR ID DWR\_RD0349\_03\_f \_ 2014\_90 Comment Code

No Photos

T4: Trim trees over roadway to at least 12 feet above ground level.

### Inspector Comment

Trim the tree limb hanging over crown roadway.

9	Rating **	M	Issue No.	86		
9	Issue Type +	Ma	Location *	CR		
Category Earthen Levee			GPS Latitude/Longitude			
Category		Start		End		
Item Trim / Thin Trees			38.3313	27°	38.331327°	
			-121.582067 °		-121.582067 °	
DWR ID DWR_RD0349_03_f _ 2014_86						
Comment Code						
	/ Thi	Issue Type + en Levee / Thin Trees _RD0349_03_f _ 201	Issue Type + Ma en Levee  / Thin Trees  RD0349_03_f _ 2014_86	Start	Start   Start	

T4: Trim trees over roadway to at least 12 feet above ground level.

### Inspector Comment

Trim the tree limb hanging over crown roadway.

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement